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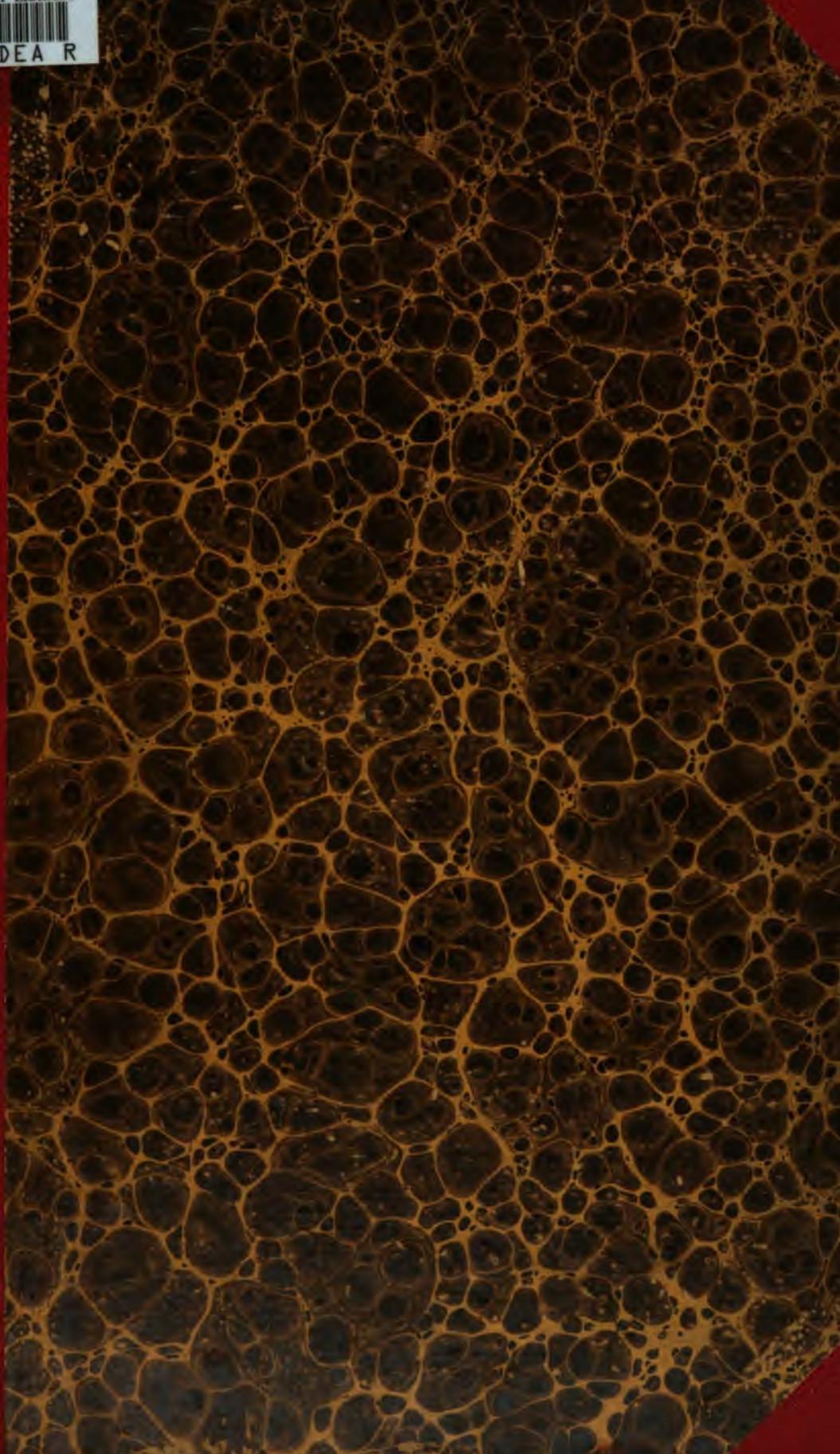
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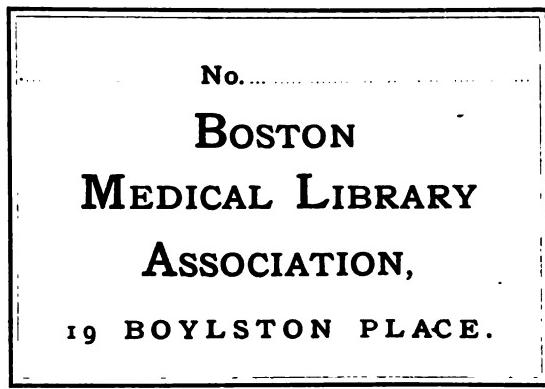
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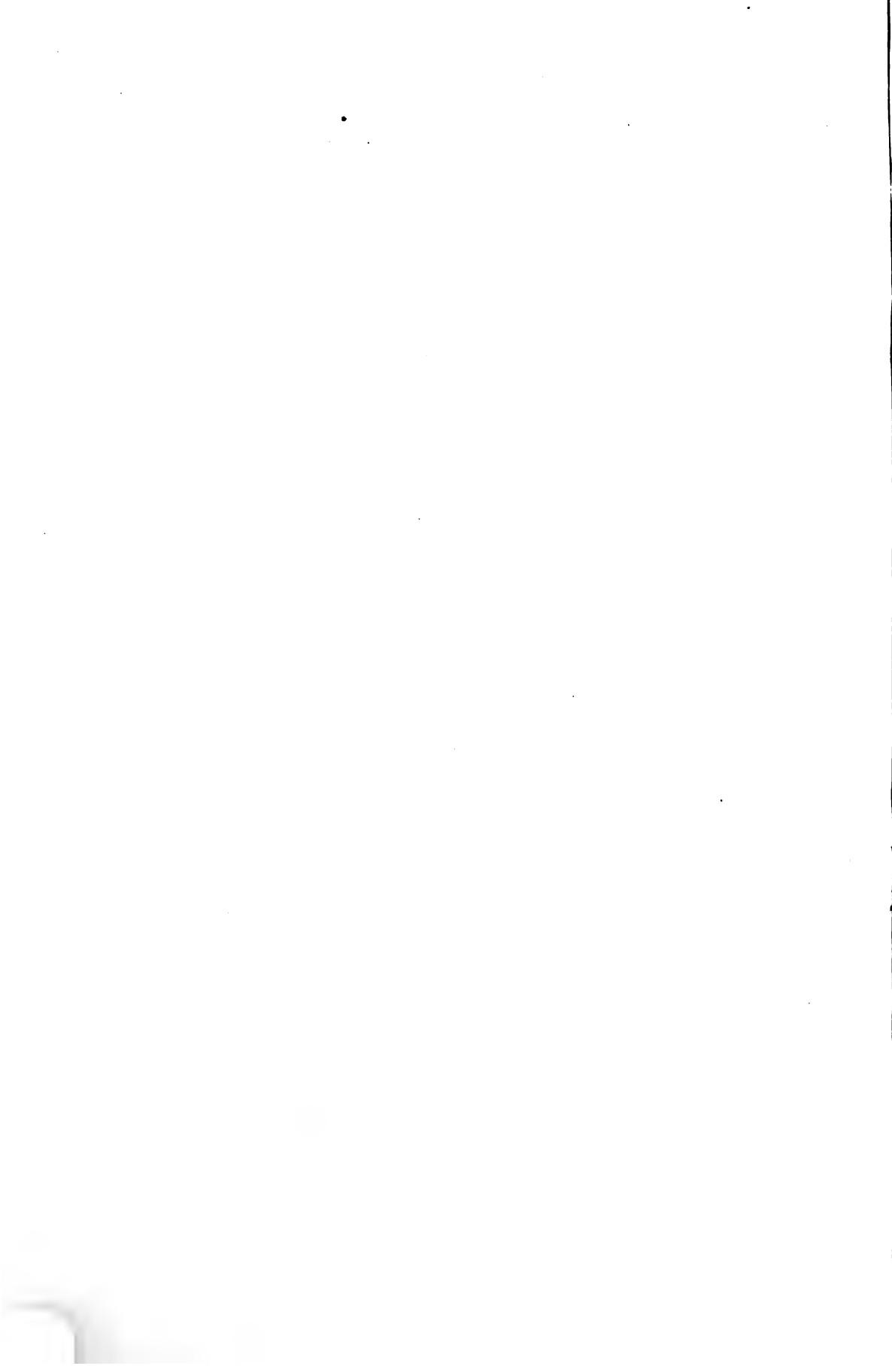












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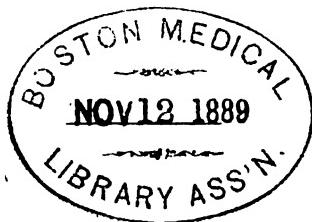
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THE PEORIA MEDICAL MONTHLY.

VOL. IX.

MAY, 1888.

No. I.

ORIGINAL COMMUNICATIONS.

A CASE OF HÆMOTHORAX FOLLOWING AN INCISED WOUND
OF THE THORACIC WALL.

BY NORVAL H. PIERCE, M. D., OF CHICAGO.

Read before the Chicago Medical Society, January 3, 1888.

The patient whom I exhibit to you is 19 years old, of healthy parents, and was six months ago in good health.

On July 13, 1887, at 3.30 P. M., while cutting a piece of wood with the stick adjusted against his chest, he accidentally stabbed himself in the third intercostal space, half an inch to the left of the right parasternal line. The knife, which I hold in my hand, presents a sharp blade two inches in length, and half an inch in breadth. After the accident he walked to a neighboring surgery, thinking the wounds of little consequence; but when he arrived the loss of blood externally was sufficient to saturate his clothes, and caused syncope.

The doctor prognosticated death in a few hours, and summoned the patrol wagon. At 7 P. M., or 3½ hours after the stabbing, I was summoned. He had received no treatment up to this time. I found the man in the condition of one who has sustained a very severe loss of blood—pale features, pinched, eyes sunken, and pupils widely dilated, surface cold and clammy, impaired hearing, pulse nearly imperceptible and very rapid, respiration sighing. There was very slight ex-

ternal bleeding at the wound, which was about an inch in length. From an inch above the sternum to the lower border of the liver the right side was dull, but at this time the liver was not displaced. No blood was expectorated. I closed the wound antiseptically, ordered an ice-bag for the chest, warm bottles to the lower extremities, head lowered, whisky, half ounce every forty-five minutes, together with ergot, very little liquids, and absolute rest.

For several days after this his life hung in the balance. The pulse improved gradually, but the anaemia persisted, dyspnoea arose, together with great restlessness and troublesome insomnia, and the right pleural cavity remained flat on percussion, the lower border of the liver gradually descended and the heart was displaced to the left, indicating that the haemorrhage was slowly progressing. At this time the advisability of enlarging the wound and taking up the bleeding vessel, or searing the lung with Paquelin's cautery, was entertained. But such a procedure entailed great risk and no small amount of uncertainty, the location of the bleeding point being unsettled. These facts, together with that of the

patient holding his own, even in a low condition, deterred operating.

Because of increasing dyspnœa I consulted with Dr. Fenger as to the advisability of aspirating, under the existing circumstances, and on July 27 a gallon of dark colored blood was drawn away. This did not cause the dullness over the right thoracic area to disappear, but relieved the difficult breathing and lessened the restlessness and insomnia.

On August 20 I again aspirated, the lower border of the liver being within an inch of the iliac crest. Another gallon was drawn away. Under the microscope the white corpuscles were not greatly increased. Up to this time the temperature had ranged from 100 deg. to 101 deg. F. Afterwards it fell to normal once or twice, but generally the thermometer registered 100 deg. F.

On September 5 diarrhœa set in, and lasted two or three days. Cough developed soon after, with very offensive expectoration. The liver dulness was gradually descending and extreme dyspnœa began. As the fluid in the pleural cavity now contained a marked increase in white corpuscles, I decided to perform the radical operation for empyema. On September 22 this was attempted. At this time there was a marked lowering of his general condition. At the time of the incision I purposed removing one or more ribs, but on account of the alarming manner in which he took the ether we thought it best to be expeditious as possible.

The tissues of the seventh intercostal were therefore simply incised, about a gallon of fluid escaped, and the opening plugged with iodiform gauze. At the end the patient was in a state of collapse, brought on, I believe, by the too sudden escape of the fluid. He rallied, however, and the next day a tube was inserted and the cavity washed with a saturated solution of boracic acid at 100 deg. F., which was repeated every second day thereafter. Fever and cough disappeared on the second. The washings grew less and less colored, and in a few days the tube was removed.

The case sets forth not so much the innate goodness of hightoned surgery, as it does the great tolerance of the thoacic cavity of effusions nearly if not quite equal to that of the abdomen. It also shows what a great quantity of blood may be lost without death, over three gallons being taken away in as many tempos. It likewise shows that the wound from which such a hemorrhage could issue is capable of spontaneous arrest.

As regards the place for the incision, I would say the seventh intercostal space is too low, as after the first week the movements of the diaphragm interfered with the drainage tube.

As you may see, this slight cut an inch in length, with its attendant disasters, has left its mark. The right shoulder is depressed one inch. The external circumference of the right side is less than that of the left.

*THE WORK AND NEEDS OF THE MEDICAL SOCIETY.

BY KATHARINE MILLER, M. D., LINCOLN, ILL.

Members of the Brainard District Medical Society:

"Man yields to custom as he bows to fate;" hence as custom and the constitution require me to offer some remarks at this time, I ask your attention for a few moments. The essayists of the day will furnish you with sufficient material for discussion on purely medical subjects; let me then review, not the work of other physicians and societies, but the work and needs of the Brainard District Medical Society.

Of the regular meetings of the past year it may be said that each was actually held. Your President had the pleasure of attending three; your Secretary has attended only one. At the annual meeting there was a fair attendance. In July a mere quorum was present; in October a fair attendance, yet only a tithe of the membership was present; in January the same. Two of the members appointed to present topics to the society have performed their duty, and three topics were in a desultory manner discussed. "Essayists absent or unprepared" has been the record with these exceptions. Owing to the absence of the Secretary's books, the only source of information, and my own ignorance as to amendments to the by-laws, no committees on microscopy and epidemics were appointed. Indeed it was only very lately that I discovered, while searching through the minutes for light on another matter, that these are

regular committees, as the record of the amendments requiring them has never been placed in any easily accessible part of the Secretary's book. Our Treasurer reported at the last annual meeting that upwards of \$50 was due the society on annual dues. Our Secretary during the past year has succeeded in collecting very little if any of this.

So much for the year's accomplishments. Was this the measure of our ability or of reasonable expectations in regard to the society's work? I must answer no. To imply that the brains of over two score of the active physicians of central Illinois can evolve in a year's time material for but two papers, with no systematic discussion of either of these, is to grant all the claims of our Eastern confrere, Billings, has malaria "paralyzed the intellect of the M. D.'s of Mason, Menard, Tazewell and Logan counties? If so it is a malaria of the mind, not of the earth, earthy." We may safely reckon as eligible to membership in this society by virtue of being regular physicians in good standing located within the district, not less than 70 persons. It is equally certain that wherever the meetings are held at least one-half the members could attend if drawn by hearty interest to make the effort. But in that lack of interest we find, I think, the secret of the small attendance and through that, of the usual uninteresting character of our meetings. To this must our efforts be di-

*Delivered before the Brainard District Medical Society and ordered printed in the PEORIA MEDICAL MONTHLY by vote of the society.

rected if we would bring our society up to that state of efficiency which it should have, and why this lack of interest? I see two principal reasons. One, that the business affairs of the society have not been conducted in a business-like manner; the other, a lack of harmony finding its way to the society's notice in other than lawful ways. Nothing leads more promptly to loss of interest in any organization than laxness in its official management. And it has been the misfortune of this society in recent years to have elected to office some who have been unable to attend its sessions regularly. Absence of the President leads to indecision in the business as well as to delay in opening the sessions of the society. Absence of the Secretary with the records has led to the omission of important business and to various irregularities in the Secretary's office and that of Treasurer, which under our constitution is in many ways so closely dependent on the Secretary's.

As to the other cause, I think it true that a firm, prompt treatment of all complaints, requiring that they be brought before the society in proper form and order or else entirely withheld from the society's knowledge greatly conduces to the welfare of any society. If a complaint be for good cause and cannot be amicably settled between the parties involved, then let it be at once brought before our Board of Censors in official form so that fair and proper action may be taken thereon, thus avoiding all unseemly bickerings.

But what is the use of a society? Some may ask, what good does it do anyway? Friends, I assure you that the good of an earnestly conducted and harmonious society cannot be over-estimated. Its effect on its membership directly, in interchange of opinion, in opportunity for cultivating a pleasant manner of address in presenting professional thoughts, in arousing and encouraging careful observation and statement, in promoting acquaintance and binding the profession together in such union as makes strong in general influence, is untold. Even more important than this, however, is the effect on the people. We all look upon the training of the people in hygienic and medical matters as most necessary. The former should command their attention that hygiene may be practiced. The latter, that reasonably intelligent views on medical subjects may prevail, resulting in better judgment in carrying out the details of nursing and in the choice of physicians. Where this knowledge prevails the regular physician has nothing to fear from the competition of the irregular or of the utterly ignorant quack.

Again you are all aware of the comparative disrespect in which our profession is held among the people. Is this not largely because we are divided among ourselves by reason of professional, or, rather, unprofessional and unchristian jealousy? What respect can the profession command in a place where such empty exists that a doctor refuses to buy drugs from a wholesale house, acknowledged to be

reliable, simply because his neighbor buys there? Whereby slurring remarks, by assumption of superior wisdom, by positive diagnosis and prognosis in cases never been seen by the speaker but differentially regarded by a rival who has seen and examined. And by all the various means only too well known to all of us by observation if not by experience of the results. A physician seeks to degrade his professional rival in the eyes of the community. Is it not time that we rose to a more distinct view of the dignity of our profession and its demands upon us? Consider for a moment what our profession means. Think on the great interests committed to our charge. Reflect on the close connection between the body with which we have to deal directly and the mind which we must to a great extent control and to which we must minister and the immortal soul whose fate is too often influenced by the conditions it is our province to ameliorate. The everyday matters of our business deal with the inmost secrets of natural law and often with the results of the action of moral law. What higher possibilities and duties could be set before us than we must accept if we attempt to do justice to our position? No breadth of knowledge or height of moral experience or depth of human feeling can fail to find its field of useful exercise in our profession. How dare we, then, assume these duties lightly and practice them carelessly! By what plea can one excuse himself who comes to consider a question of life and death, where the most important issues are at stake for at least one soul, in a condi-

tion wherein he is unfit to care for his own present physical welfare, in plain Anglo-Saxon, drunk with liquors or narcotics? Do you wonder that people sneer at a professional class whose besetting sin is drunkenness? Many of whose members hold their work so lightly that they can condescend to such reckless disregard of their first duty as physicians, the duty of bringing to the questions involved a clear brain, competent to call to the sufferer's aid the fruits of years of study and observation.

How, too, can we look for the respect of the community as long as we do not respect one another? I confess that I am not afraid to defend my fellow-practitioners whenever defense is possible, and it is generally possible, except where one has wilfully unfitted himself for doing his duty, by drunkenness or some similar habit. I question whether any of us has a right to condemn on lay evidence, the practice of any person whom we have reason to believe has honestly tried to fit himself for our profession. Errors of judgment there must be. None of us are infallible. If a doctor's mistake, so regarded by the laity, is reported to me, who is benefited if I adopt the opinion offered me and express some severe criticism? The listener has probably told the story, "just to see what the comment would be," and turns my remark as a sweet morsel under his, or her tongue and reports it, with variations, as an illustration of the jealousy rife in the medical profession.

A few weeks ago a patient came to me with a terrible tale of how two doctors of our town had horribly

treated a lying-in-woman. How they had "torn her all to pieces and then tied her up in rags from head to foot," etc., etc. Inquiry developed a history of primiparous labor, waters drained away 24 hours before pains came on, an ignorant midwife in attendance, another day and night, woman exhausted and death of child threatened, forceps delivery, child apparently still-born but finally resuscitated by the diligent care of the doctors, a lacerated perineum with a prospect of perfect repair under the treatment adopted, which included bandaging of the limbs. I hope that person reported my version of the case as forcibly as she had given the neighborhood story.

This is but an illustration of how the laity in their ignorance look at things medical. I do not think I should have helped myself or the profession by accepting without inquiry the story offered me. Indeed we cannot expect the people to respect us for our profession's sake, or to respect our profession for its inherent worth and dignity, until we respect ourselves and our profession; until a member of our fraternity can claim for himself or herself at least a suspension of judgment in cases of injurious report, until an opportunity for defense is given; until every one who can lay honest claim to having made effort to fit himself for this work, and who does the work conscientiously, can look to others of our number, confident of receiving charitable judgment and excuse for errors, and until by concerted interest and action on the part of educated and reputable physicians quackery is driven from our midst. To adapt to

our needs the words of Mrs. Livermore at the recent I. W. congress, "above all, at the present time, should physicians cultivate what they grievously lack, a fine *esprit du corps*. They should stand together with a solidarity that cannot be shaken by difference of opinion on unessentials nor weakened by jealousy, nor undermined by the gossip and scandal of the world." With such a solidarity the physicians of this country can compel the needful sanitation and effectively enlighten the people on sanitary matters, and, above all, can make the name of doctor an honor and the profession respected. With such interested and unanimous thought and action new life can be infused into every association of physicians and their meetings, dealing with questions of personal or local or national importance, may be made so interesting that not only doctors, but the laity of the vicinity, will enjoy them.

Is it not possible for us to cultivate this spirit, so to improve our opportunities, that this society may become a power for good in this district? That it's membership may be an honor to be sought by every physician eligible and it's meetings attended by all it's members, who are not compelled by professional duties, and that regretfully, to stay away? The answer rests with you and with me; with each and every one of us. Are we willing to lay aside personal prejudices and work together heartily for these ends.

I thank you for your attention and for the courtesy shown me during the year in which I have had the honor to preside over your deliberation.

PROFESSIONAL FRATERNITY.—ADDRESS OF THE RETIRING PRESIDENT.

BY S. L. LAMBERT, M. D., GALESBURG, ILL.

Read before the Military Tract Medical Society May 1, 1888, at Peoria, Ill.

Members of the Military Tract Medical Association:

One of the duties, under the by-laws, incumbent upon me as your retiring President, is to deliver a farewell, a valedictory. I bid farewell to the office, but not to the Association. I shall not undertake to present a resume of the many advance steps our favored science has made during the past year. I take it that you have kept abreast with the onward march of progress. Gentlemen, your presence, to participate mutually in the deliberations of this session, gives assurance of your devotion to medical science.

To avoid being tedious I pass to a random presentation of a train of thought, suggested by this topic: "Professional Fraternity."

The *mass* of people, the press, always allude to us as the medical fraternity. We are noticeably a *distinct* class, and for this reason our individual and associate actions are closely scrutinized by the general public. Our individual professional judgment passes upon such important subjects as hygiene, health, disease, life and death, while our associate deliberations arrest public attention.

By your presence here *you* prove yourselves imbued with this most important principle, *fraternity*. It is the guiding, controlling, creating influence of this principle that makes the existence of such an association as this possible. It invites us to the *purest* professional and social relations. In

passing I would like to remark that, were the social relations between *us*, as *individuals*, more carefully cultivated, then would we be mutually benefitted. By being thus intimate as true *fratres* there would be the most free interchange of opinions upon all medical topics of the times. Each would be free to ask questions upon any subject that might be the theme of conversation, and would expect in return all the information the brother could impart. Such intimate associations would stimulate a devotion to the science, to careful reading, to acute searching and methodical observation. Each of us as we might take a step up, upon a higher intellectual plane, with a warm heart and outstretched arms, would elevate the whole profession with him.

As the force that elevates the lofty peak also rears with it the massive foot-hill's and the surrounding plain, so the giant intellect, guided fraternally, strives to elevate, to take up with it, the whole profession. The grandest characters we have had are our most devoted students and investigators, our most acute and careful observers, our most distinguished teachers. The physician who is devoid of this essential element of true success is a barnacle upon the professional hull, an excrescence, a phantom tumor. From this class come the material worked up into charlatans, quacks, itinerants, advertisers and impostors. Instead of being actuated by the true principle, they must be actuated either by mercenary motives or ignorance, or both. Their personal greed for gain, for spoils, makes them wolfish and impatient of living into a pure, earned medical reputation, which is the *grandest* of acquisitions. Being ignorant, they are not social with the profession, for then they come in contact with intelli-

gence and *must* discuss medical topics. Having nothing, they have nothing to give, and so are justly estranged and ignored by all true members of the profession. With us of the regular profession I can see the great advantages to be gained by cultivating more intimate social relations, as at once will follow more intimate professional relations. More generally then will the intellectual attainment of one become the property, the gain, the inheritance of all. Such brotherly confidence actuating all, such freedom in seeking

and imparting opinions would at once make consultation the rule and not the exception. It was with pleasure that I endorsed the social features in our present programme, introduced by our worthy secretary and the efficient local committee. I feel it a duty in this public manner to compliment our secretary, for his untiring efforts to make this meeting of the association a success. In retiring from the office of this association I must again say that I deeply appreciate the honor you conferred upon me.

FEMALE WEAKNESS.

BY C. C. COOPER, M. D., HAVANA, ILL.

Two of the most prevalent causes of female weakness are: Tight lacing and confinement in school. While these two predisposing causes are so closely blended together, it seems almost impossible to speak of them separately. A girl may lace and not attend school, but she cannot (or will not), attend school and walk in the highest ranks of society and not lace.

As physicians, with a knowledge of the anatomy and physiology of the organs, it should be our duty to not only cure or treat, but prevent diseases.

According to the fifth "Great Law of Transmission," hereditary tendencies revert back to the mother more frequently than the father. Girls are placed in school at from 12 to 16 years, confined there till 22 or 25, nine months in the year. Nowhere is the neglect of early physiological development more marked than in our boarding schools and seminaries, where every hour in the day, from 6 in the morning till 6 at night, is allotted a task. The hours that should be devoted to exercise are occupied by reading, drawing,

painting, or music, and an hour's walk each day is regarded as a degree of exercise quite sufficient for the requirements of health.

By this plan the mind is kept constantly in thraldom of control, and early chafes out under the depressing influences of a never ending surveillance.

'Tis not the mere bodily exertion that is of benefit, but the relaxation of the mind as well.

Let us compare these girls with the working class of the same latitude, or with the North American squaw or the powerful negress of the South, and it is difficult to believe they all sprang from one great parental stem and originally possessed the same degree of physical capacity. But observation proves that women who are not exposed to the depreciative influences of fashion, etc., can compete in strength and endurance with the males of their race; indeed in some countries they are regarded superior.

And how much less liable are they to diseases so common to-day, and

why? Because they were strong, muscular, well developed, and if exposed to cause predisposing to female weakness they had the power of resisting the depreciating influences.

Nature is absolute and immutable in her laws, she will not be governed at will, and her subjects must yield to her commandments and wise dictations, and when an organ is once affected or perverted, it is only by the strictest attention if it ever be restored.

As a rule girls are put in school too young, before their monthly periods are established—chlorotic, anaemic and nervous; appetite capricious, and at the age and period in life when the most nutritious diet and outdoor exercise is demanded by nature; thereby disregarding all hygienic advantages, starving the different organs—body anatomically and physiologically undeveloped, nervous system exhausted without being supplied, appetite is lost and only a few dainties or pastry is eaten.

'Tis true the last decade has seen a most gratifying improvement in this respect; outdoor exercise has become more general, such as rowing, tennis, archery and croquet.

When it is no longer the custom or style to cramp the liver and lungs, paralyze the heart, box-pleat the ribs, there will be more healthy women in our land. A fine form is not to be despised, and it should be the height of every woman's ambition to make herself as attractive as possible without infringing on the laws of nature. Lacing, 'tis true, has the great advantage of developing the figure, concealing the defects, and making her look

graceful and pretty, but is not comfortable.

The habit of constricting the body at the waist by tight clothing, etc., confines that part as if by splints; indeed it accomplishes just what the surgeon does who bandages the chest for fractured ribs, with the view of limiting thoracic and substituting abdominal respiration. It impedes circulation and vermicular action, displacing the liver, crowding the stomach and intestines down onto the pelvic viscera displacing the womb against the bladder or rectum, causing constipation and dysuria.

How little is thought of constipation with these school girls; how little do they regard the calls of nature or the irreparable injury following the habit. Is it possible for the bloom of youth to remain on the cheek with the effete matter retained from two to six days; decomposition sets in, absorption takes place, producing that swarthy chlorotic, anaemic and a marked disturbance of the general health.

The tissue is wanting in firmness, the complexion pale and pasty, and frequently disfigured by unsightly eruptions. What is to be most feared in these cases, however, is a cough which may exhibit its self, for it is at this period consumption claims more victims than at any other period of life; and the importance in assisting nature to establish these monthly periods and tide youth safely over this critical period cannot be over-estimated. The alarming number of wives, mothers and daughters now suffering and sinking from these causes demands our most earnest and

careful consideration and advice. 'Tis true, some, more through ignorance, many through recklessness or carelessness, and a few through actual necessity, go lightly or thinly clad during these periods while the womb is hyper-armic and congested, and the physical symptoms soon begin to manifest themselves of a preverted and abnormal condition. It is just as essential for the womb to perform its function physiologically as for the heart, liver, kidneys or the lungs. The only difference, however, is the womb may be affected for a longer period without the patient's knowledge or the mere

recognition of the pathological condition by the physician, to warn her of her danger.

We cannot help but believe the time is not far off when these important functions will be reopened and examined in a fair and impartial manner uninfluenced by prejudice, superstition or tradition without that pre-emptory and dogmatic spirit and settled by the requirements of a more enlightened knowledge when the dissenting voice of adverse faction be heard no more. It is safe to say progressive literature on this subject foreshadows this change.

CHARACTER AS A THERAPEUTIC FORCE.

B. C. TOLER, M. D., ASTORIA, ILL.

Read before the Military Tract Medical Society May 1, 1888, at Peoria, Ill.

I do not know why I am impelled to present this subject for your consideration to-day, unless it is because I love the profession of which I am a member, and am willing now, or at any time, to contribute anything that I can to elevate its standard of excellence and inspire in the minds of its members a higher appreciation of its true dignity and worth. I cannot, here, notice the wonderful advancement which has been made in medicine and surgery in the last quarter of a century—and especially in surgery—but shall content myself with the bare suggestion that, along the line of thought I shall offer. There has been a sad want of attention, and many of the agencies, which of right belong to us, have been seized upon and utilized by the ignorant and vicious and thereby a

large crop of quacks have been produced under the name of mind curers, faith doctors, etc., etc. Now in the discussion of this subject it may be well to analyze and define somewhat. And first, permit me to say that therapeutic force is curative power. Any agent employed, the effect of which acting upon the patient will tend to cure him of disease, or, acting upon the community at large, will promote sanitary conditions, is a therapeutic force. Nor should it be forgotten, that in the treatment of almost all diseases we do not rely solely upon any one agent but usually employ several, expecting each to contribute its share in the general result.

Passing to the other branch of the subject, I remark that character is what a man *is*, and what he *is*, de-

pends not so much upon the adventitious circumstance of birth or surroundings, as upon the use he has made of the opportunities afforded for observation and reflection—the industry he has exercised in stowing his mind with all possible knowledge of the universe about him. And in this analysis it is proper to eliminate all considerations which relate to political or religious tendencies or beliefs, for these, after all, are but mere appendages due to circumstance or accident. But supposing that the foundation has been laid in a thorough medical education, coupled with the most judicious training, there are certain elements of character, potential in themselves as therapeutic forces, which are requisite in order that the physician may attain the highest degree of success. I shall not attempt in this paper to notice all of this, but calling attention to only a few of them, shall rest in the hope that I may impart some general idea of the subject under discussion; and, for no sake of brevity, shall consider in a group the elements of self-reliance, firmness, and courage. These characteristics must not be confounded with either vanity, rashness or egotism, but should have for their basis the conscious fact that ability has been acquired to comprehend the pathological conditions to be considered, and also the knowledge to apply those therapeutic forces which our noble art has afforded.

The physician, thus equipped, will be found to possess an equipoise and firmness of carriage and behavior which will beneficially affect all those with whom he comes in contact. In the sick room he will be at home, su-

perintending all the affairs thereof, commanding (if necessary), advising, reassuring, inspiring. His very presence will be a benediction, and who can doubt that these elements of character are therapeutic forces which powerfully supplement his pharmaceutical armamentarium. There are many other elements of character which have an equal claim for consideration with those already mentioned. For instance, what therapeutic force do you think there is in cheerfulness?—in hopefulness?—in sympathy? Is any one disposed to say that the physician equally educated and prepared in all other respects, but destitute, or nearly so, of these qualities will be as successful as that one whose face beams with cheerfulness and hope? Do you not think that encouraging words fitly spoken—that kindly expressions of sympathy may not at times enkindle the almost expiring vital spark, and loosing the patient stranded upon the shoals of despair, set him adrift upon the tide to recovery and health? But it may be said that many persons will be found in wholly unconscious states, and therefore the influences under consideration could not possibly affect them. But let us not be too certain here, for may it not be, that having reached the farthest known limit of scientific truth, there may exist beyond, in the domain of psychology, many forces as yet unknown and therefore unappreciated. If the charges be here made that I am drifting into the region of metaphysical speculation, I reply that equal uncertainty is seen in many of the phenomena attending the application of agents in an exactly scientific manner. The reason why almost

all our remedial agents produce given results is enveloped in mystery. That is to say, why certain drugs produce specific results is a problem not yet solved, and perhaps never will be. For instance, a patient is feverish; almost all of us would agree to prescribe small doses of aconite. The effect of this drug, by its paralyzing action upon the nervous system, is to reduce the circulation and promote perspiration. But why aconite is followed by these results no physician on earth can tell. The fact that such are the effects of aconite is, for all practical purposes, sufficient to justify its use.

So it is a fact that mental states do modify physical conditions. The one is as easily explained as the other. What is to be insisted upon, is, that the physician should be able to bring to bear all the forces attainable in his professional services. Let us illustrate at one or two points. For instance: in pneumonia, which at the present time seems too common and fatal, the blood is liable to be charged with fibrous tissue. There is danger, therefore, that the fibrin will be separated from the blood, from a clot in the heart, impede or fully stop circulation and end the life of the patient. Hence, by many physicians, ammonia is freely administered with the expectation that the fibrin will be kept in solution. This disease, if there is no complications, runs usually from eight to twelve days. Upon the eighth day, in the majority of cases, begins the stage of either resolution or suppuration. That is, the diseased lung begins either to free itself or to be filled with purulent matter. In the latter case the patient sinks into

a state of unconsciousness, which soon ends in death. What therefore must be done, is to support the patient through these eight or twelve days of the natural history of the disease. It does not come within the scope of this paper to discuss what drugs shall be employed to accomplish this purpose. These are well understood and can be safely left to the judgment of the physician. But since mental states and determinations, which are exemplified in cheerfulness, hopefulness, buoyancy and will-power, even thought-power affect physical conditions, I can but insist that the physicians should so understand it, and in order to the attainment of the best results, should himself possess such character as will enable him to impart to his patient these factors, as well as his aconite or genuine ammonia. In other words, why may not a mental condition be a decisive factor in preventing heart clot, and tiding the pneumonic patient over the eight or twelve days? The entire discussion at this point, hinges of course upon facts, and fortunately there are an abundance of them well established, showing that mental states have been efficacious, as we say, in preventing, arresting or palliating disease. Napoleon I, as you are aware, visited the various hospitals of Europe where were all sorts of contagious diseases, to prove that if one is determined not to take a disease he will not. Whether his theory was correct is questionable, but the fact is well known that he escaped all diseases to which he was exposed. Kane, influenced by great mental activity and an absorbing sense of duty, with a diseased heart, endured

the hardships of an expedition to the north pole. General Gordon, who, until recently has held so prominent a place in the thoughts of all christendom, was a sufferer from angina pectoris. I quote his own words: "I may say that I have died suddenly over a hundred times." The London *Lancet*, referring to this case, expressed the hope that General Gordon would long continue to show to the world what can be done by men with grave diseases, but with faith in their own mission.

Dr. Edward Clark, an eminent physician of Boston, now deceased, said, "The proverb that the mind can kill and the mind can cure not only illustrates a popular belief, but a physiological truth." He furnishes an illustration occurring in his own practice which shows the remarkable influence of mental determinations upon physical conditions. He says, "I once gave to a stout, healthy Irish woman, at night, ten grains of Dover's powder as an anodyne. She expected a cathartic, supposed she had taken a cathartic and was determined to a cathartic result." Continuing he says, "When I made my visit the next day, she met me with a beaming countenance, and in glowing Celtic phrase expressed her gratitude at the happy result which had been attained." The usual physiological action of the Dover's powder had been antagonized by attention to an expected result. A very successful physician once said to me that he had cured more than one man by administering *aqua* and bicarbonate of soda, who would have died had he thought he was only taking water and salsaratus.

Sir Humphrey Davy placed a thermometer in the mouth of a paralytic patient. Supposing this to be a curative force, so great was his faith in Sir Humphrey, that forthwith there was a complete restoration from the paralysis.

Broussais, an eminent French writer on physiology, while illustrating the wonderful influence of mental states in producing even the most serious organic diseases, says: "Do you not see, in fact, that strong affections of the soul produce inflammation of the encephalon, in all of the mucus membranes and in the parenchyma of the viscera? Do we not observe that the passions, which I may call chronic, determine scirrhus and indurations of every kind in these parts? Every one knows that the scirrhus of pylorus may be the effect of long-continued griefs."

Says Dr. John Hunter: "There is not a natural action of the body, whether voluntary or involuntary, that may not be influenced by the peculiar state of the mind at the time."

I might further show the power and influence of the human character over the brute creation by the well-known fact that the valor and daring of the rider will in times of danger, as in the chase or upon the battle field, be communicated to the horse. Or again, the wonderful effect of the mere presence of a man among men, could be illustrated by General Sheridan's arrival after his hard ride at the battle of Winchester, where, as you all know, he turned defeat into victory.

I need not pursue this line of illustration further. Enough has been said to

show that mental states and determinations are often wonderfully potent in their effect upon physical conditions, and that, therefore, there is abundant reason for concluding that they ought to be turned to account in restoring to health those suffering from pain and sickness. Why, indeed, should not mental therapeutics be made a regular department in all medical colleges.

So that it would be authoritatively taught that in order to attain the highest and best success, it is necessary not only to be a well educated physician, in the common acceptation of that term, but also to possess those elements of character which go to make up a well rounded and symmetrical man, whose power and influence will be felt and acknowledged everywhere—in the community—where his suggestion and recommendations in regard to sanitary

conditions and regulations will be heard and heeded, and especially in the sick-room, where his very presence will be an inspiration and a blessing. Now, the object I have in presenting these views is to stimulate us all to a higher conception of the dignity of our calling, and to watch with zealous care lest our standard of excellence be lowered, but rather that we may take advanced ground along the lines indicated.

In conclusion permit me to suggest that it is *our* work to be careful as to the character of those we admit to our offices as students. We should feel assured that they possess those elements of character which will develop into therapeutic factors, which, working harmoniously with acquired powers, will make them an honor to the profession and a blessing to mankind.

SOCIETY TRANSACTIONS. CHICAGO MEDICAL SOCIETY.

STATED MEETING, JAN. 3, 1888.

The President, W. T. Belfield, M.D., in the chair.

Dr. Henry Gradle read a paper on

MORBID NASAL IRRITABILITY.

Morbid nasal irritability, or irritable nose, is a condition of morbid sensibility of the nasal surface associated with hypertrophy of the submucous cavernous tissue. The condition has been inadequately described, and is confounded in text books mostly with chronic catarrh. The best account of it is in Mackenzie's article on neurosis of the nose, in the "Reference Handbook of Medical Sciences." Most writers who have described it in the periodical literature, consider it mostly

in view of the distant reflexes to which it gives rise. The local reflexes form the basis of the present paper.

There is first, the vascular reflex. The vascular or cavernous tissue normally developed to a slight extent at the front and rear end of the inferior turbinated bone, is enlarged and augmented, and may appear also on the side of the septum, on the floor of the nose and on the front end of the middle turbinated bone. Through any irritation by dust or chilling of the surface this vascular plexus becomes engorged, and if well developed in proportion to the size of the nasal capacity, it obstructs the passage. It is the tempo-

rary or fleeting character of the obstruction which characterizes the irritable nose, not any permanent narrowing of the passage. Almost invariably engorgement occurs on one side at a time and then may jump over to the other.

Dependent upon this vascular dilation is the second reflex, namely, sneezing. This may attain such a degree as to annoy the patient steadily. With the sneezing there occurs a third reflex, namely, copious secretion of clear mucous, indicating the absence of any inflammatory condition. This irritable nose may lead to reflexes in distant regions, as to the eyes, ears, throat, or nervous system at large. The irritable nose may be a symptom of some other nasal disease, such as catarrh or polypi; it can also be caused by large, irritated tonsils. But in many cases it exists by itself, without any other primary disease to which it could be traced. It is very much influenced by the climate, and patients can get relief by going to the mountains of the West, or to the Pacific coast.

In the treatment, any traceable causes, such as tangible diseases of the tonsils, should first be removed. Quinine relieves the attacks, but probably does not cure them. No other drugs have seemed to the writer to be of any service. Where the condition is symptomatic of another disease of the nose, the only cure is the destruction of the cavernous tissue by the galvano-cautery, or in milder cases, by chromic acid. The latter agent is not as reliable as the former. A cure is possible whenever the extent of hypertrophied cavernous tissue is circumscribed, while, where it is very diffuse, relief, but not an absolute cure, can be promised.

Dr. N. S. Davis, jr. reported a case of

RUPTURE OF AN AORTIC VALVE.

From the appearance of the specimen I exhibit, a diagnosis cannot be

made with certainty, but from the history of the case, together with the appearance of the valves, it seems probable that sudden rupture in one of them has taken place.

The history is as follows: On the 17th of November the patient entered Mercy Hospital. He complained of illness for about four months; prior to that time he had been in good health. Some years ago his hearing began to fail and he lost his employment as switchman on a railroad on that account. After that he continued to work as a day laborer. Four months previous to entering the hospital he was carrying a heavy load of coal upstairs when suddenly he felt something give way in his left side; he experienced considerable dyspnoea at once, and symptoms of cardiac insufficiency date from that time. At first the dyspnoea was noticeable chiefly on walking or on making rapid movements, but it was sufficient to necessitate his giving up all work. The dyspnoea increased steadily and he became very markedly anaemic, and in addition exhibited signs of general oedema. At the time he entered the hospital there was evidently fluid in the abdominal cavity as well as extensive anasarca of the extremities. He was feeble and so short of breath that he was unable to lie with any degree of comfort, but had constantly to sit, and slept in this position. The pulse was exceedingly feeble, the heart movements very rapid.

My father saw the patient the day after he entered the hospital and examined him before the clinical class. At that time his condition was as follows: In addition to the dyspnoea, oedema and anaemia, a collection of fluid was found in one of the pleural cavities. The lungs were evidently oedematous. There was probably chronic venous congestion of their lower and posterior portion. The movement of the heart was consider-

ably more rapid than normal, its action was feeble, the cardiac sounds were distant and it was suggested that probably there was some fluid in the pericardial sac. In addition there was present over both the mitral and aortic areas a regurgitant murmur. The area of cardiac dullness was greatly increased in all directions. It was supposed that the heart was greatly dilated and that regurgitation occurred in connection with a lesion of the valves. There was no prior history of rheumatic trouble in the case. It was noticed that the liver was considerably enlarged. A little later in the same day the house physician noted that the patient was sleeping almost constantly, and that the heart's action was very much more feeble and that the respiratory motions were only eleven to the minute. On arousing the patient the respiratory movements improved somewhat. On the following morning the patient was more drowsy, stupid and sleepy. In the afternoon of that day he exclaimed suddenly that he felt faint, and with a gasp or two was dead.

The post-mortem was made by Dr. Frank Andrews. He found a small amount of liquid in one pleural cavity. The lungs were oedematous and quite firm in the lower and posterior parts from chronic venous hyperæmia. The liver was enlarged, unusually hard and full of blood; the spleen normal; the left kidney normal; the right kidney had a slightly adherent capsule. The heart was greatly enlarged. In the pericardial sac there was an ounce and a half of fluid. The heart on section was found to be very much dilated—both the left and right ventricles were dilated. The walls, as you see, are not thickened. On the right side the valves appear normal; on the left side the mitral valves are normal but the aortic valves are seen to be thickened; especially one of them, whose edge is considerably thickened and somewhat rounded. Nowhere is ulceration or

destruction of tissue from that cause to be seen. The valves are not roughened by verrucosities or otherwise. The part of the valve where there is loss of continuity is also slightly thickened. The break in continuity, here seen, occurs in the edge of the valve just where it should be attached to the aorta. If rupture took place necessarily it took place four months before the death of the patient, and naturally thickening of the torn edges might occur. There is also present in the aorta above the valves small areas of thickening and hardening, evidence of long prior inflammation of its lining. Taking into consideration both the morbid appearance and the history of the case, it is most probably that four months before death, at the time from which the patient uniformly dated his trouble, a rupture of the aortic valve occurred. The valve had prior to this been enfeebled by the changes that had occurred in it incident to an extension to the valves of older endarteritis.

Dr. Norval Pierce reported a case of

OPERATION FOR HÆMOTHORAX.

(See page 1.)

Dr. A. E. Hoadley: There are some points about the case of hæmorthorax that occurred to me while the history was being read, that I should like to refer to. I should conclude from the history that some large vessel was wounded—that would be the inference, as the exsanguination of the patient was rapid and extreme, and I should also conclude that if that vessel was in the lung that there must have been expectoration of blood. I do not see how it could have been avoided if the blade of the knife penetrated the lung sufficiently to wound a large vessel—therefore I exclude wounding of the lung. In the situation of that wound, immediately beneath the chest-wall, is the internal mammary artery, a good-sized vessel. The intercostal was suggested, but these are given off from

the internal mammary, and in that situation are small, and could not exsanguinate a patient so rapidly and completely as this patient was in so short a time, so I concluded that the internal mammary artery was the one divided. Then again, it seems to me, that it would have been good practice to have endeavored to have secured that vessel; there was a straight cut through the intercostal muscles, and I think some kind of forceps could have been introduced with a view of compressing the internal mammary artery. After the thoracic cavity was full of blood no harm could have come from the introduction of the instrument designed to compress the divided ends of the artery by the admission of air; provided it had been done antiseptically. I think the hemorrhage could have been controlled by introducing a button into the wound, such a one as would go through the wound with a string attached to it, pushing it through the thoracic cavity, and then by making traction on the string outside, it would have closed the bleeding vessels. This accomplished the subsequent treatment would have been more satisfactory. As far as the tolerance of the pleural cavity of blood is concerned, there is no difference between the two cavities, abdominal and thoracic. The one can tolerate the presence of blood as well as the other; the one can absorb as large a quantity of blood as the other; they are both serous membranes, identical in character and powers of absorption.

The case given is very interesting, and certainly very remarkable. I was very much interested in the history. The patient evidently has good vitality to stand such a strain.

Dr. Pierce: I have nothing special to say in closing the discussion. Of course I might now do a great many things that I did not do at that time. But the man was in such an extremely low condition that anything more would have been out of place. Dr.

Fenger was not sure that it was the internal mammary artery. The wound was a slight distance out of its course, about half an inch. Indeed, the character of the haemorrhage, at least after the first week, is against this as the source. The position of the scar has changed with the sinking of the chest.

As regards the clot being removed, blood does not necessarily clot in the pleural cavity at all, but may remain fluid indefinitely.

Dr. W. T. Belfield exhibited a specimen of

MUSCLE INFILTRATED WITH TRICHINÆ.

It was a piece of gastrocnemius muscle from the amputated leg of a man now in the Cook County Hospital. Some eighteen years ago this man, then a resident of New York, in company with a number of other individuals ate of some poorly cooked ham and sausage; nearly all of those who partook of this article of diet became very ill within a week, and a large percentage died. This man was very ill for two months, and did not entirely recover his health for some four months. In consequence of the circumstances surrounding the case the difficulty was recognized as trichiniasis, and an examination of the muscles of those who died confirmed the diagnosis. This man recovered, and during the succeeding 18 years has enjoyed good health, except that he has at various times, and more particularly during the last six eight years, suffered from rheumatism in different parts of the body.

This muscle, like all the other muscles of the amputated leg, is thickly studded with trichinæ. By taking a fresh cut surface near the light you can see the little white specks very closely set. These are shown in the microscope to be trichinæ. Pieces of muscle taken from all parts of the amputated leg are found as thickly set with the parasites as is this piece, and inasmuch as these parasites are more numerous in the the trunk than in the

limbs, we may infer that the number of trichinæ this man contains in his body runs up into millions. Of course it is not unusual to find muscles studded with trichinæ in individuals who have been in the habit of partaking of raw sausage or half cooked pork; but it is rare to find them so thickly placed where the history makes it certain they were taken at one time. Very few individuals recover who swallow so

many at one time as to produce so numerous a progeny. Those who are in the habit of taking uncooked pork can at different times take a few trichinæ without at any one time suffering from the invasion of large a number as to produce the acute symptoms of trichiniasis.

The amputation was for disease in the knee-joint and had nothing to do with the condition of the muscles.

AMERICAN MEDICAL ASSOCIATION.

Held in Cincinnati, O., May 8, 9, 10 and 11, 1888.

Dr. A. Y. P. Garnett, of Washington, D. C., delivered the President's address, upon the

MISSION OF THE AMERICAN MEDICAL ASSOCIATION.

After speaking of the large number of medical schools and the rapid increase in the number of doctors of medicine in this country to facilitate the attainment of a

HIGHER MEDICAL EDUCATION, the speaker offered the following propositions:

1. That a standing committee, to be called a

COMMITTEE ON LEGISLATION, be appointed for each state, territory, and the District of Columbia, to consist of five members of the medical profession in good standing, three of whom shall have no official connection with any medical school, whose duty it shall be to carry out, as far as possible, the following instructions:

First: That said committees, or a majority thereof, shall attend the sessions of their respective legislatures, or as often as their duties may require it, for the purpose of using all honorable means looking to the

REDUCTION OF THE NUMBER OF MEDICAL SCHOOLS

in the United States, and a consequent diminution in the number of medical

graduates. As a practical measure to this end, they urge the passage of a law requiring that, in the future, charters for creating medical schools shall contain a clause requiring that a full term of four years' study be required before the granting of a diploma to any student, and that no student shall be matriculated who has not passed an oral and written examination in the ordinary branches of academic study. Further, that any college failing to show a greater number than fifty matriculates annually, for three consecutive years, shall forfeit its charter and be abolished.

Second: That these committees use all diligent effort to secure an ordinance creating a

BOARD OF MEDICAL EXAMINERS in each state and territory, which shall have no connection with any medical school, and which shall be required to examine all applicants for license to practice medicine in their respective states. Any person practicing any branch of the healing art, without license granted by said board, shall be subject to the penalties as the law may provide. This committee should also be authorized by statute to nominate, to the governors of the state and territory, competent and learned members of the medical profession to constitute said board of examiners.

Third: That the chairman of said

committees of five be required to submit, at each annual meeting of this association, a report embracing a full statement of what has been accomplished by each.

II. That the faculties of the several medical schools within the limits of the United States be once more urgently requested to

CALL A CONVENTION

at some central point, for the purpose of consultation and the adoption of some more general and uniform system of medical education. That, in addition to a four years' term of study, the requirement of a preliminary education including some

KNOWLEDGE OF THE CLASSICS, shall be suggested. Any school or college which shall refuse to enter into such an arrangement shall be excluded from all connection with the American Medical Association, and its alumni shall not be recognized as members of regular profession

The speaker said that he was aware that these suggestions embraced some very radical, and seemingly impracticable, changes. If these seeds fell upon barren soil, he would at least enjoy the consciousness of having honestly, conscientiously, and fearlessly met the great and pressing issue of the day.

Dr. Roberts Bartholow, of Philadelphia, delivered the

ADDRESS ON GENERAL MEDICINE.
The last International Medical Congress was, in some respects, the most important one that has ever been held, especially in regard to preventive medicine. To an unprejudiced observer it would seem that its proceedings ought to have received some consideration from this public press. Yet such was not the case, and this is the usual

POSITION OF THE PRESS TOWARD THE MEDICAL PROFESSION.

Those organs of public opinion do not ordinarily regard medical organizations seriously, and they seldom notice matters of the most importance to

the general welfare of the community which may be discussed at these meetings. A surprising amount of ignorance still exists in this latter part of the nineteenth century, and people still think that the therapeutic art is based on some 'ism or 'pathy. On the Continent of Europe

HOMOEOPATHY IS NEARLY EXTINCT, but here it still lives, being held up by social influences and by misrepresentations on the part of its advocates. The statistics upon which these men rely to win converts are often made up out of whole cloth, as was done by a Dr. Somers, whose pretended official figures, showing the results of practice in the larger cities of this country, seem to prove that homœopathic methods of treatment are fifty or sixty per cent. more successful in curing disease than are those of legitimate medicine. In one of the large cities of the West circulars were widely distributed in which the claim, based upon these supposed official figures, was made that regular medicine would soon become extinct in this country. The speaker had taken pains to consult the proper authorities in regard to the sources of these alleged official figures, and had found that there were none, and that the statistics were pure fictions. No further argument was necessary to establish the falsity of a system which had to resort to such means to insure its success. The remedy for this, which regular medicine has to offer, is to improve its art.

THE SCIENCE OF THERAPEUTICS should be made more certain. This is a branch of medical study which is not cultivated as it should be, and a true drug-action is not widely enough diffused. The acquisition of this knowledge is greatly hindered by the mass of old prejudices which still cling to this science, and impede its progress like the barnacles on the hull of a ship. All this complexity and superfluity of olden times must be wiped away; at

least two-thirds of the pharmacopœial preparations could be dispensed with, and scientific therapeutics would thereby be the gainer.

The knowledge of a drug and of its various constituents should be thorough and only its active principles, or, if these have not been isolated, its strongest and most constant preparation, should be prescribed. In

THE ALKALOIDS

we have singleness and simplicity of action, and they may also be given in small doses and in a form most agreeable to the patient. This is a matter of no small importance.

The speaker then referred to the

DOSIMETRIC SYSTEM OF MEDICINE, into the claims of which he had carefully examined, but which he did not consider as in any sense new. Furthermore, the system was crude, and its adherents did not usually base their modes of treatment on true scientific grounds.

A great objection to the employment of a crude drug was its uncertainty of action. In the case of

JABORANDI,

for example, there were two alkaloids, pilocarpine and jaborine, whose action was dissimilar, and in prescribing the crude drug the practitioner could not be as certain of obtaining the desired result as when an alkaloid was exhibited. Many other drugs, such as opium and nux vomica, offered examples of this same complexity of action. The study of

THE PHYSIOLOGICAL ACTION OF REMEDIES,

as a basis for their scientific use in the case of disease, is still young and dates only from the early part of this century. It is a curious fact that, at the same time that the foundations of our knowledge of the physiological action of remedies were being laid, Hahnemann and Mesmer were imagining the spiritual essence. An illustration of the utility

of the modern methods of the study of therapeutics is furnished in the employment of the nitrites in the treatment of angina pectoris. It was through the knowledge of their physiological action, experimentally obtained, that they came to be employed therapeutically. Homœopathy, the speaker maintained, had nothing to do with the progress of modern scientific medicine. The true therapeutic action of drugs was one of antagonism.

Therapeutics also presses into its service the physical forces whose action is fixed and according to known laws. Even the most skeptical is forced to admit the

EFFECTS OF GALVANIC CURRENT UPON CONGESTION,

and upon the products of inflammation, such as strictures. Electrolysis is comparatively new in its application, and it is full of therapeutic promise.

THURSDAY MAY 10TH—THIRD DAY.

The Chairman then presented the
REPORT OF THE COMMITTEE ON NOMINATIONS,

in which the following officers were proposed for election: President, W. W. Dawson, of Ohio; First Vice-President, W. L. Schenck, of Kansas; Second Vice-President, Frank Woodbury, of Pennsylvania; Third Vice-President, H. O. Walker, of Michigan; Fourth Vice-President, J. W. Bailey, of Georgia; Treasurer, R. J. Dunglison, of Pennsylvania; Secretary, William B. Atkinson, of Pennsylvania; Librarian, C. H. A. Kleinschmidt, of the District of Columbia. Trustees (to fill vacancies): E. M. Moore, of New York; J. H. Hollister, of Illinois, and J. M. Toner, of the District of Columbia. Members of the Judicial Council: W. A. Phillips, of Kansas; A. M. Pollock, of Pennsylvania; W. C. Van Bibber, of Maryland; J. F. Hibbard, of Indiana; C. S. Wood, of New York, and G. L. Porter, of Connecticut. To

deliver the Address on General Medicine at the next annual meeting: Wm. Pepper, of Pennsylvania; Address on General Surgery, P. S. Connor, of Ohio; Address on State Medicine, W. H. Welch, of Maryland. For the Committee on State Medicine, one member was appointed from each State. Sub-committee to fill vacancies that might occur, J. B. Hamilton, Wm. Brodie, and A. Garcelon. The candidates proposed were unanimously elected. It was announced that the association would hold its next annual meeting in Newport, R. I., on the second Tuesday in June, 1889. Dr. H. R. Storer, of Rhode Island, was appointed Chairman of the Committee of Arrangements.

Dr. E. M. Moore, of Rochester, N. Y., then delivered the

ANNUAL ADDRESS ON SURGERY.

He reviewed the history of surgery from the earliest times, showing that many of the supposed novelties were in reality only revivals of the methods of the past. But in one particular more than any other the progress of modern surgery was most remarkable, and it was one of prime and vital importance, upon which the success of operations in greatest measure depends ; this was in the

TREATMENT OF WOUNDS.

Progress in the management of amputation wounds may be said to have begun with Pare and his ligature of arteries. At first a limb was amputated by a circular incision, the soft parts and the bone being divided at the same level ; then it was thought to cover the bone with integument, and this gave rise to the multiplicity of flaps of all shapes and sizes. The surgeon always had to meet and control hemorrhage, and it was strange to see how nearly the ancients approached the modern methods of haemostasis without reaching them. A cord was tied tightly around a limb, but it was

long before the tourniquet was devised. A number of bandages were wound around a member to expel the blood from it, and yet it is only in our own day that the method of bloodless operation has been perfected by Esomach. Before the introduction of the ligature amputation wounds were necessarily left open, and the exposed surfaces were covered with all sorts of ointments. Galena, however, favored the application of a

COLD WATER DRESSING, and Liston revived this method many years later, urging its general adoption in vigoras and general language. After the employment of ligatures had superseded all other methods of controlling hemorrhages from the large vessels, attempts were made to secure primary union by immediate closure of the wound ; but they were of very doubtful success until the introduction of antiseptic methods. As regards the question for amputation for gangrene, the speaker favored the selection of the red line of demarcation for the site of operation, when possible, and he believed the success was far greater in such cases than when the limb was removed at a higher point. In this he differed from most surgical teachers of the present day, the method being a return to that of ancient times.

Gunshot wounds were formerly regarded with the utmost dread, it being supposed that the leaden bullet was an active poison ; but since the adoption of thorough antisepsis in wound treatment, surgeons had lost much of their fear in dealing with these injuries. In the matter of

OPERATIONS UPON THE ABDOMINAL CAVITY,

the same changes had taken place. It was no longer thought that the surgeon who had dared to remove an ovarian tumor was no better than a murderer, for to such a degree of perfection had the methods of dealing

surgically with the peritoneum been brought, that the mortality following laparotomy was now below that attending any other capital operation. Surgeons no longer dreaded to touch the peritoneum, for they had learned by experience that it was not injury that this membrane resented so much as it was dirt. Thorough and absolute cleanliness was the keynote of success, and this was the essence of anti-septic surgery. The name of Lister would be written by posterity alongside that of Jenner, for he had added a word to the language that would ever remain there, although it was not necessary to use carbolic-acid gauze in order to practice Listerism. Perhaps nothing showed in a more striking manner the results of antisepsis than did the statistics of Volkman regarding compound fractures of the leg. Of 885 cases of this nature, treated in the civil hospitals of Germany and England prior to the discovery of anti-septic wound treatment, 339 resulted fatally, while of 75 consecutive cases treated since the adoption of antisepsis there was not a single death. Many of these cases were complicated by wounds of the joints, and of those treated conservatively ankylosis had followed in but one instance. The speaker recalled an invitation he had received fifty-one years ago from Professor Mutter, to see him perform

SUBCUTANEOUS TENOTOMY

of the tendo Achilis. The operation was vehemently opposed by many older surgeons of that day, Barton even refusing to be present and to be a witness of what he considered a most hazardous and unjustifiable operation. These men did not understand the great principle involved in subcutaneous surgery, and little thought that this new method was to be

THE FIRST STEP TOWARD ANTISEPSIS. which is truly the legitimate descendant of subcutaneous surgery. The sur-

gical world soon, however, awoke to the realization of a great advance in operative procedure, and subcutaneous methods were adopted in all possible cases, their application reaching the most extreme point when Guerin divided all the spinal muscles in his attempt to cure lateral curvature.

Dr. More then took up the subject of **COMPOUND DISLOCATION OF THE ANKLE-JOINT.**

Amputation in these cases, he believed, was seldom necessary. Even in the most severe cases he advised the adoption of conservative measures. If the course of events rendered operation necessary, he would first resort to resection, reserving amputation as the last and most extreme measure. He looked upon continuous warm-water irrigation as the most effective means of preserving the vitality of the contused soft parts, and preserving sphaelus, when resection was to be performed. The malleoli and their attachment to the astragalus should be preserved, if possible. At first the parts should be immobilized in plaster of Paris; but very delicate, passive movements should be begun early and continued carefully from day to day. If such were done, the result would, in most cases, be a perfect preservation of the joint-motion.

The speaker then referred to the employment of hydrochloric acid, one part in twenty, in the

TREATMENT OF CARIES.

This had been recommended at a previous meeting of the Association, and he had tried it with some misgivings, but had found such great benefit to follow its use that he was led to count it one of the greatest advances of the age in surgical therapeutics. He spoke of the attempts which had been made to secure a sterilized atmosphere in which to operate, which had, however, been hitherto unsuccessful. The spray was often bad, for it favored a de-

posit of minute foreign particles on the surface of the wound. A striking feature of the present age was that the really great men of medical science were separated by no great distance from their medical colleagues ; there were leaders, it was true, but their disciples followed closely in their steps, and at times even outstripped them. In conclusion, the speaker referred to the vast benefits which had been conferred upon mankind by the members of the medical profession, and by none more than by surgeons. These had long ago left the ranks of the barbers, and were now invading the fields formerly regarded as peculiarly that of the physician. The spleen, the kidneys, the intestine, the liver, and the brain had all been subjected to the knife of the surgeon, and it was difficult to define the possibilities of modern surgery, which was an admirable blending of science and modern action.

DELEGATES TO FOREIGN SOCIETIES:

R. H. Plummer, San Francisco, Cal.; H. A. Kelly, Philadelphia, Pa.; N. S. Davis, Chicago, Ill.; W. H. Myers, Fort Wayne, Ind.; A. E. Hoadley, Chicago, Ill.; F. E. Waxham, Chicago, Ill.; Alexander McAllister, Camden, N. J.; J. J. Chisholm, Baltimore, Md.; D. A. K. Steele, Chicago, Ill.; J. V. Shoemaker, Philadelphia, Pa.; S.

J. Jones, Chicago, Ill.; Ephraim Cutter, New York; L. A. Sayre, New York; C. C. Vaughn, Ann Arbor, Mich.

OFFICERS OF SECTIONS

were then announced as follows: Practice of Medicine, F. C. Shattuck, Boston, Mass., Chairman; G. A. Fackler, Cincinnati, Ohio, Secretary. Surgery, N. P. Dandridge, Cincinnati, Ohio; Chairman, W. Q. Roberts, Louisville, Ky., Secretary. Obstetrics and Gynæcology, W. H. Wathen, Louisville, Ky., Chairman; A. B. Carpenter, Cleveland, Ohio, Secretary. State Medicine, J. B. Lindsley, Nashville, Tenn., Chairman; S. T. Armstrong, Marine Hospital Service, Secretary. Ophthalmology, Otology and Larynology, G. E. Frothingham, Ann Arbor, Mich., Chairman; G. C. Nashville, Tenn., Secretary. Diseases of Children, J. A. Larrabee, Louisville, Ky., Chairman; C. J. Jennings, Detroit, Mich., Secretary. Medical Jurisprudence, W. Kiernan, Chicago, Ill., Chairman; T. B. Evans, Baltimore, Md. Secretary. Dermatology and Syphilography, L. D. Bulkley, New York, Chairman; M. T. Corlett, Cleveland, Ohio, Secretary. Oral and Dental Surgery, F. H. Rehwicks, Chillicothe, Ohio, Chairman; E. S. Talbot, Chicago, Ill., Secretary.—[*Maryland Medical Journal*.

THE ROCK ISLAND MEETING.

The Illinois Medical Society met at Rock Island, May 15. There were about 100 members in attendance. President W. O. Ensign, of Rutland, introduced the Rev. W. S. Marquis, who opened the proceedings with prayer. Dr. C. Truesdale delivered the address of welcome on behalf of the local profession. He discussed the thirty-seven years' work of the society

and the influence it exerted on the profession. He further said:

“ Nevertheless, the questions are constantly arising in the minds of the profession, has it accomplished as efficient work as should be reasonably expected? If not, wherein has been the failure? Are the means and methods for doing its work the best that can be devised? This, of course, is not an appropriate time to discuss these ques-

tions, but they are of sufficient importance to receive some consideration when the proper time arrives. The work of the society is constantly increasing in amount and importance. Abuses which come within the sphere of legitimate action are constantly springing up all over the State as rapidly as toadstools. When one swarm of cormorants who prey upon public credulity in the form of quack doctors is vanquished and driven from the State, another brood under a different form is hatched and ready to take their place. One important work of the society should be to discourage, in every possible way, the establishment of any more medical schools, either inside or outside the State. It should labor to strengthen old schools already well established and reputable, always giving that school the preference which maintains the highest standard of education. The society shoul place itself in such a position as will enable it to speak authoratively, and have its voice respected upon all subjects pertaining to the profession within the State. In order to do this it should have the strongest possible organization that can be secured under the laws of the State, and equip that organization with the best possible means and methods of accomplishing the work. The people of modern times who fight battles successfully, are those who have the best organization and the best equipments. This is true in every department of human activity. The hearty co-operation and sympathy both of the medical profession and the people in general, can be relied on in all that the society has to do. The people desire to see the society grow and prosper, and to continue to do good, and that the meeting here may be instrumental in adding to the common stock of knowledge of the profession, and that the occasion may be pleasant and agreeable to each one,"

Dr. C. W. Earle responded, regretting that the well-known modesty of the Chicago Medical College Professors had prevented them from doing as had been expected.

Dr. Ensign, who presided with the parliamentary skill characteristic of him, first dealt in his annual address with the deaths of various members of the society during the past year, and then took up the mooted question of reorganization and the place and time of holding the annual meetings. He discussed the relation of the State Board of Health to the practice of 'medicine, and favored the limitation of the issue of licenses to practice only to such as could pass a successful examination before a State Board of Examiners, to be made by law a part of the State Board of Health. More thorough preliminary education in all primary elements was urged.

On motion, the Committee on Nominations was then appointed. Dr. F. Billings read the Report on the Practice of Medicine, which was discussed by Drs. Rooney, Thomas, Jones, Truesdale and others. The report of "Gynæcology" was read by Dr. A. R. Jackson and discussed by Drs. Cullimore, A. L. Rooney, Earle and others.

Dr. C. W. Earle read a paper on "Antiseptic Obstetrics," after which the society adjourned.

At the second day's session Dr. Frank Johnson read a paper on the "Present Status of Bacteriology," which was discussed by Dr. E. Andrews, F. Billings, Prince and others. Dr. Maria J. Mergler read a report on "Salpingitis," which was discussed by

Drs. Cullimore of Jacksonville, Northcott of Sweetwater; J. H. Miller of Oconee, Gable of LaSalle, D. T. Douglass of Colfax, Rich of Wenona, Truesdale and Gregg of Rock Island, Rosa H. Engert and others. Dr. H. J. Reynolds read a report on "Dermatology and Venereal Diseases," which was discussed by Drs. Rooney, Prince of Jacksonville, Ferry of Eureka, F. C. Robinson of Bureau, Bird of Mason City, Long of Toulon, Keefer of Sterling, G. Wheeler Jones of Danville, Davis of El Paso, E. Andrews of Chicago, and Dr. Thompson. Dr. G. W. Jones then read a report on "Obstetrics."

On behalf of the Committee on Revision of the Constitution, Dr. T. M. McIlvaine presented the following resolutions:

WHEREAS, It has been demonstrated by the experience of past years that the present constitution, by-laws and rules of the Illinois State Medical Society have become totally inadequate to a proper and satisfactory carrying out of the aims and purposes for which said constitution, by-laws and rules were formulated; be it

Resolved, That a committee of five members be appointed, whose duty it shall be to secure from the Secretary of State a charter under this law providing for the incorporation of organizations not for pecuniary benefit.

Resolved, That this committee be empowered, and is hereby authorized to draw up a new constitution and new by-laws for the future government of this society.

Resolved, That said committee be required to mail every member of this society a printed copy of the proposed constitution and by-laws at least sixty

days prior to the next annual meeting in 1889.

Resolved, That the consideration, amendment and adoption of the proposed constitution be the rule of order at the next meeting, immediately following as nearly as possible the delivery of the President's address.

The society then adjourned till the evening. In the afternoon the society was driven to Rock Island, where the arsenal buildings and shops were inspected, and returning took cars to Black Hawk's Watch Tower, where supper was served by the ladies of St. Luke's Hospital Guild.

In the evening the Secretary read the annual report of the Committee on Publication, and that of Dr. Walter Hay, of Chicago, Treasurer, together with a certificate of audit, which were approved. The Committee on Publication desired the continuance of an appropriation of \$25 to secure some missing volumes of annual reports, which was ordered.

The papers of Drs. C. W. Earle and C. W. Jones, of the Committee on Obstetrics, were discussed by Drs. Gregg, Ingersoll, Miller, Kiernan, Miller, Robinson, Littlefield, Cullimore, Rooney, Truesdale, Will, Rooney, Davis and Cowden. Dr. Bishop then read the report on "Ophthalmology and Otology," which was discussed by Dr. S. J. Jones and others.

The Committee on Nominations reported as follows on the third day:

President, Dr. C. W. Earle; Vice-Presidents, Dr. P. H. Oyler, of Mt. Pulaski, and Dr. G. L. Eyster, of Rock Island; Secretary, Dr. D. W. Gra-

ham, of Chicago; Treasurer, Dr. T. M. McIlvaine, of Peoria; Committee on Revising of Constitution, Drs. T. M. McIlvaine, of Peoria; C. Trues-

dale, of Rock Island; E. P. Cook, Mendota; G. W. Jones, Danville, and F. Billings, of Chicago.—*Medical Standard.*

SELECTED ARTICLES.

PELVIC INFLAMMATIONS.

In dealing with this subject I shall consider only such parts of the pelvic cellular tissue as may be involved in the broad ligament and adjacent parts. Here we have a factor (the peritoneum), which is wanting to all the tissues below the pelvic floor and which greatly magnifies the importance of inflammations of these parts.

There are three important ways of studying the diseases of this comparatively small part of the human economy. First (and the only one used, until within the past few years), is Clinical Observation; second, is observation by Post-mortem Section; and third, is observation by Ante-mortem Section. In this age of laparotomies we are having abundant opportunity for this latter kind of study. It is only by combining the results of all methods of study that we can arrive at anything like the truth, and therefore we will briefly consider these troubles from every point of view.

There are patients walking into our clinics constantly, who, on examination present a condition of lacerated cervix, more or less, with a so-called thickening of the broad ligament, or with an induration at the base of the broad ligament, with a distinct band extending outward from the laceration of the cervix or even a condition of tension, as described by different authors. Dr. Henry C. Coe, in a most excellent article on this subject, based on a post-mortem examination of a large number of cadavers, in 1886, asks the question: "What was the actual pathologi-

cal condition" (found on post-mortem examination)? "Sometimes an enlarged lymphatic gland, more often a small, hard cicatrix in the anterior or posterior fold of peritoneum that forms the broad ligament, near to its base. In some instances I have found the 'thickening' not to be above the vaginal fornix at all, but simply a cicatrix in the vault itself, resulting from a laceration of the cervix, through the vaginal junction." This condition is invariably put down in our case books as 'cellulitis,' when the patient presents herself for treatment; any failure to remove this is very apt to explain, in our minds, our failure to cure the patient of her symptoms or to account for any subsequent trouble which may follow. Dr. Coe mentions, in the paper already quoted, a case which bears directly on this part of the subject: "I would add briefly," he says, "that in only a single case have I felt satisfied that I found well-marked remains of a cellulitis in a case of laceration of the cervix. The patient died of typical pyæmia following perineorraphy. There was absolutely no evidence of acute inflammation in or around the induration referred to, hence the surprise of the gentlemen who witnessed the autopsy and carefully touched the fornix vaginæ (and afterwards the indurated spot) at my request, when they heard afterward that the patient's death had been positively referred to the 'lighting up of an old cellulitis.'" So much for this so-called cellulitis at the base of the broad ligament.

We now come to consider the inflammations in that part of the ligaments which bear directly on our object. There is a class of cases presenting themselves complaining principally of pelvic pains or of recurring attacks of "inflammation in the stomach." The history will probably develop the fact that this trouble dates from a former labor or miscarriage and very often the patient has not been pregnant since that time. Frequently a gonorrhœa will have been the beginning or else they have "taken cold during a menstrual period." There is generally more or less disturbance of the menstrual function with leucorrhœa. There is probably some increase in the pulse and temperature. Vaginal examination reveals a hard, tender, ill-defined mass of induration to one side or other of the cervix or even posterior to it. Here we have a picture of our old friend, chronic cellulitis. What is the lesion we find in such a case when the abdomen is opened? I have not had an opportunity of seeing in the dead-house a patient who had died from such a condition and whom I had had a chance of examining during life. I have, however, had quite an extensive experience in seeing such cases on the operating table and have never yet failed to find more or less extensive inflammatory disease of the uterine appendages: one or both tubes were involved, and often the ovaries were also included. Even the most conservative men are being gradually pushed from one point of vantage to another, and are being slowly but surely forced to admit that our ideas of chronic cellulitis in the broad ligament were a myth, and that what we formerly diagnosed as such was, for the most part, nothing more nor less than diseased tubes and ovaries. Dr. Emmet, the one man above all others living, to whom we owe most of our advance in gynæcology, and who has heretofore been our teacher of pelvic

cellulitis, says, in an article on Pelvic Inflammation, in 1886: "during the past winter, Professor Polk kindly invited me to witness an operation, in his service at Bellevue Hospital, for the removal of a diseased tube. The patient had suffered a double laceration of the cervix uteri, and I had, at a previous examination, expressed the opinion that the subsequent condition was one of thickening and shortening of the left broad ligament from an old cellulitis. At the operation, to my surprise, no broad ligament was found, and the enlarged tube lay directly against the side of the vagina. The relative position, or line, with the fundus of the uterus and ovary remained unchanged, and yet the fingers of the operator, as they grasped the tube, could be distinctly felt from the vagina, and in contact with its walls." Were more patients, who are being treated for cellulitis, put on the operating table, the gentlemen so treating them would be astonished at the almost absolute lack of evidence of the cellulitis looked for. The literature is full of cases illustrating this and other similar mistakes. For instance, two cases have recently been reported by John B. Deaver, who says of the first: "the patient had been treated by several physicians for stricture of the rectum. After the passage of bougies, blood and pus would pass from the rectum, and finally the bougies caused so much pain that they had to be dispensed with." He removed from this case double pus tubes. The second case "had been seen by an eminent physician, and he had pronounced her trouble an old cellulitis, which had not yet undergone resolution." Dr. Deaver opened her abdomen and removed double pus tubes, a cyst of the left broad ligament, a small cyst of the right ovary and a blood-cyst. I have mentioned these cases because they have occurred recently and in the hands of a general surgeon, and not in

the hands of a gynaecologist. I might go on indefinitely multiplying these examples, but will mention but one other, which occurred in my own practice. The patient had been very sick after her last confinement, six years before, with what her physician called "an inflammation in her stomach." Since that time she had never been well and had been treated by a large number of physicians for "womb-trouble." I removed a large pyosalpinx and an ovarian abscess. To-day, now over a year, the woman is in perfect health.

There are great differences of opinion amongst observers in this field as to the origin of these inflammations. There are those first who, following the teachings of Dr. Emmet, hold that cellulitis is the primary inflammation and that septic material is carried into the cellular tissue along the veins and lymphatics; that the peritoneum becomes involved secondarily, and finally the tube is included in the advancing disease. Others contend that the inflammatory condition starts first in the vagina or uterus, extends along the mucous membrane of these organs into the tubes, and then into the peritoneum, which is finally and almost always involved. Dr. Emmet claims that "there is not the slightest evidence in proof of this view, nor is it the probable course, unless the advancing inflammation has been produced by gonorrhœa or its consequences." His own explanation is, however, open to the same objection, and I cannot see why a non-specific inflammation should not follow this course as well as a specific one. I think the safe position is half way, and I accept both explanations as not only possible but probable channels of extension.

Again there is an equal diversity of opinion as to the source of the infection, viz., gonorrhœa; others, such as Sænger, have found at least three, viz., salpingitis actinomycotica. Of cases of

salpingitis tuberculosa I have clinically seen several: one case I recall, was operated on and one tube was removed; the other tube could not be freed from its adhesions and was left behind. The girl, at the time of operation, had no other manifestation of tuberculosis. The track of the drainage tube never closed, but continually discharged pus. Within a year and a half she died of well-advanced phthisis. Dr. Battey "regards very many, indeed most of these serious inflammations in pelvic cellular tissue, which are so destructive in their consequences, as depending upon disease of the ovary, either cystic or cirrhotic disease." He, however, excludes from this classification, those cases of gonorrhœal infection. Dr. Polk has maintained that salpingitis is the original disease, but, I think, without sufficient grounds. Finally, there are some who contend for a peritonitis as the origin. The inflammation can undoubtedly arise from traumas. I have operated on a case which arose during parturition, in which there had been no previous sign of any such trouble.

But whatever the source, and whatever the path of contagion, certain it is that a cellulitis never exists in the broad ligament without involving the peritoneum; nor does a peritonitis exist without involving the cellular tissue. The two tissues are so intimately connected that it seems impossible to me to have an inflammation of one without the other.

I have said that almost without exception, the cases we used to consider cellulitis now prove to be inflammatory tubal disease. Before going farther, I will modify that statement just this much: sometimes a small adherent ovarian cyst, a dermoid cyst, a pelvic abscess, a small hæmatocoele, and even a tubal pregnancy, has been mistaken for a cellulitis, or inflamed tubes. In fact, almost any small growth which may occur in the pelvis has been mis-

diagnosed, so difficult is the differentiation. Provided it is not that of pronouncing the mass cellulitis, such a mistake is perfectly excusable, and is constantly happening in the best hands. For instance, I examined a patient on two different occasions, together with one of the best gynaecologists of Philadelphia. She was also examined by several other gentlemen, not specialists. All agreed that she was suffering from a tubal pregnancy, probably past the second month. The woman had every sign of pregnancy: suppression of menses for two months, characteristic appearance of the breasts, with milk in them; passage of what we looked on as decidual debris from the uterus; gastric disturbances, with bladder irritation and constipation. There was a tender mass to the right of the uterus, and the characteristic colicky pains were present. The operation gave us a beautiful cyst of the right ovary, as large as a good sized orange. It makes no difference whether the differential diagnosis is accurately made or not, although, of course, this is to be desired, for any growth which a competent diagnostician is at all likely to confound will require the same treatment.

When the inflammation, of whatever character it may be, attacks the uterine appendages, and also of necessity the surrounding tissues, several changes take place. Generally one or both ends of the tubes are closed by plastic adhesions; part or all of the connective tissue in the broad ligament is absorbed; the opposing serous surfaces become adherent, and the appendages are bound down to the walls of the pelvis; the rectum, small intestines and omentum become attached to the appendages; and in one case I found the veriform appendix adherent for half an inch or more along the right tube. The ovaries are included in this general mass of adhesions; sometimes they contain pus, but often are

simply adherent, without having broken down. The tubes may be empty, with the exception of a little caseous matter, or they may be distended with pus (pyo-salpinx), serum (hydro-salpinx), or blood (haemato-salpinx). At times the adhesions around these masses are so degenerated that they break down with very little handling, and the tissue of the tube itself is so friable that the ligature cuts through. In other cases the adhesions are so well organized that it is impossible to break them up without extreme danger of tearing open the ureters or some of the large pelvic blood vessels, which are invariably greatly engorged. Intestines have been torn into in the removal, and the bladder has been opened. In fact, the dangers and complications to one not accustomed to dealing with such cases are truly appalling.

It is easy to be seen what must be some of the sufferings of these women. Pain is probably the most prominent symptom, and what generally drives them to the doctor for relief. This pain is constant and universal, with greater or less intensity; pain on defecation, on coition, on turning suddenly, on making a misstep or from any jar; the approaches of their husbands become at times intolerable; they have constant leucorrhœa; constipation; menstruation painful and irregular, usually increased in quantity and frequency; sleeplessness, hectic, night-sweats; the bladder is almost always irritable, and, as a rule, they have been sterile since the trouble began; they have recurrent attacks of pelvic inflammation, with which life is often threatened. One or all these symptoms may be present. On vaginal and rectal examination, a tender, ill-defined adherent mass is found running off from the uterus laterally; it is tortuous and boggy, and you can generally place a finger in the groove between it and the uterus; however, this cannot always be done, for at times the mass is so

adherent that the two appear to be one.

What are we to do to cure these women? Will rest in bed, local applications, hot water injections, the internal use of mercury, or the thousand and one medical means used, accomplish anything? These all have their advocates, but they are becoming fewer every day. Dr. Vineberg recently, in an article advocating the use of mercury, said: "It is no more difficult for my mind to comprehend the *modus operandi* of resolvents given by the mouth than it is that of iodine and boro-glyceride applied to the vaginal mucous membrane in influencing the products of inflammation situated at some distance from the surface to which the application is made." I quite agree with him, that it is no more difficult to comprehend one than the other, but it takes a far greater stretch of the imagination than I can bring to bear on this subject to comprehend the *modus operandi* of either. What do these gentlemen attempt to do with their resolvents? They are trying to resolve a particular focus of tissue from the midst of other tissue very similar to it in organization; the original tissues of the tubes and ovaries are changed and replaced in great part by new formation, and to accomplish such a cure this all must be changed back again in some mysterious manner, or must be absorbed. If the mercury or iodine is given or applied in sufficient quantities to have any appreciable effect on these diseased masses, I do not hesitate to affirm that the patient will be killed with the treatment. Dr. Emmet says: "The prognosis should be a very quiet one as to the results to be gained by local treatment, where we can establish the fact that the female has suffered from gonorrhœa, or if her husband has done so shortly before marriage; moreover, we should be equally as careful in all cases, and without reference to the cause, where the pelvic inflammation

has been of long standing, and with the history of frequent recurrent attacks. Under these circumstances, with a limited number of cases, no permanent benefit seems to result from local treatment, and the operation for the removal of the tubes and ovaries has to be resorted to eventually." In another part of this paper he speaks of months and years as at times necessary to effect a cure. Who of us can keep our patients under proper and constant treatment for such a length of time? Even if we could, I do not believe the cure could be made. Until these gentlemen will put such a patient as we have been discussing on the operating table, open her abdomen, show us the lesion, and, without disturbing it, close the abdominal wound, then put her on their local and general treatment; and finally, after again opening her, show us that the disease has been really cured, I for one can never accept their teaching. If a cure is made, I must rather believe there has been a mistake in diagnosis. No one can ever tell positively what he has to deal with in the abdominal cavity until he has opened it, and even then it is sometimes extremely hard to say definitely what is what.

There is no question, however, but that local and general treatment will often afford great relief to these patients, and I do not wish to be understood as denying this truth. For instance, I have seen a single purgation so relieve a case of pyosalpinx that for a short while she refused to have an operation done. This benefit was, of course, due to removal of pressure by unloading the bowels and by depleting the pelvic blood vessels. Again, hot water injections will give temporary relief by softening the adhesions and relieving tension, as well as by relieving congestion. But here the good ends, and the patient, being satisfied with this, goes away and is put down cured, only to have a recur-

rence of her troubles and to fall into other hands, to go through the same useless performance.

Aspiration has been tried in these cases, but has been found wanting. Most diseased tubes are constricted into several pockets, which cannot be emptied unless they are individually punctured by the needle. This I take to be well-nigh impossible. Even could all the pockets be reached and emptied, in the words of Dr. Johnstone, "by these means you remove only the products of the inflamed epithelium, and nothing short of the complete ablation will get at the root of the difficulty, for in my opinion it is the source of most all protracted and recurrent pelvic inflammations." There can be no doubt whatever but that Dr. Johnstone is perfectly right. Dr. Polk has proposed that the abdomen be opened, the adhesions be freed, the tube be squeezed empty, and after putting in a drainage tube to keep the appendages in proper position, the abdominal wound be closed. My experience tells me very decidedly that this will not prevent a recurrence of adhesions, with a return of all the symptoms. There is nothing to be done then, if we wish to free our patients from their sufferings and prevent recurrent attacks of peritonitis, but to remove the disease itself. This means the loss of both tube and ovary to the woman—at times both tubes and ovaries; for when a tube or an ovary is removed, either, which might be left on the corresponding side, would be useless, and might prove of great danger; therefore, when one goes, the other should always go also. It makes no difference whatever in the mortality of the operation.

It is being constantly contended against this procedure that the patient is being mutilated; that she is being unsexed and made sterile; that she becomes more masculine in appearance. Of this I can only say that the objec-

tions are absurd, and are made for the most part, by men of no personal experience in these matters, and they are only rehashing what was thought and said long years ago, when we knew practically nothing about the subject; they are simply displaying their ignorance with every such assertion. In every case of old chronic inflammatory tubal disease, the woman is absolutely and forever sterile, as far as that tube is concerned; there is not the slightest possibility of her ever conceiving through it, and it is a source of constant menace to her life. Why, then, should we hesitate to remove it? Would there be any hesitation, for fear of mutilation, in removing any other member of the body under like circumstances? Excepting in very rare cases, the woman is not unsexed. All operations, the world over, protest against this assertion. Such an authority as Sir Spencer Wells says, "that passion in woman laughs at oophorectomy." I know of but one exception to this rule, and that only by rumor. The patient, a prostitute, left her profession in disgust. Surely moralists will not complain of that result! I know of several instances where the woman has become the aggressor, when before operation she was entirely passive. Far from becoming masculine, the effect is quite the reverse. As a rule the women fill out and become altogether more matronly in appearance.

There is of necessity some danger attached to an abdominal operation, but in proper hands the mortality should not be more than from 5 to 8 per cent. One great objection to all abdominal operations, and of which we do not yet hear enough, but will later, is ventral hernia. Dr. Homans, of Boston, for instance, has had over thirty cases amongst more than 300 operations, or about 10 per cent. If he has kept track of this many, there must be a great many more of which

he has never heard. Other operations are constantly meeting with hernias. This is the most serious objection I can find to the operation.

There has been heretofore a great deal of discussion as to where and how the operation should be performed. Although a well appointed hospital is desirable, it is more a luxury than a necessity. The operation can be done in the humblest cottage with equal safety, but will then require more attention from the surgeon. I have repeatedly operated in our worst and dirtiest tenement houses in Philadelphia with the most happy results. Cleanliness is absolutely necessary, not only of the operator, but of the assistants, as well as of everything to be used near the wound. The bugs and animals on the floor and walls will look after themselves. This cleanliness can be obtained perfectly well without the use of chemical substances, which at times have tipped the balance, at a critical moment against the patient, and caused her death. I consider the use of a mercurial or carbolic acid irrigation of the abdominal cavity as an extremely dangerous procedure, and never to be used under any circumstances. This is carrying antisepticism to fanaticism, and fanaticism can do nothing but harm.

The simpler and less cumbersome the steps of the operation are made the better. I am in the habit of proceeding as follows: Everything being made as absolutely clean as possible with soap and hot water, the patient is placed on an ordinary kitchen table, with her legs, up to the pelvis, wrapped in blankets; her chest is also covered and protected. The abdomen is exposed from the pubes to above the umbilicus. After having thoroughly cleansed the site of the incision with a little ether, and again with water, a clean towel is put over the blankets both above and below, thus isolating any unclean surface with which any-

thing which is to be used may come in contact. A short incision in the median line, of probably two inches in length, is made through the tissues down to the peritoneum. No grooved director is used, and no particular care is taken whether the wound is in the linea alba or not; all bleeding points are controlled with haemostatic forceps. The peritoneum is then caught up with several pairs of forceps, and slightly nicked between them. As the air rushes in, the intestines fall back, and the opening can be extended to the limits of the wound without any danger. Two fingers are then passed through the incision down to the pelvis, when it is determined whether the diseased parts can be removed or not. If the operation is to be proceeded with, the wound is enlarged, or not, as the case may require; usually a two or three inch cut is quite sufficient.

The adhesions, if there are any, are now broken up in all directions, and the mass is brought up into the abdominal wound. This takes more or less time, as the case varies in difficulty. Intestinal adhesions must be dealt with very gently, and great care must be taken not to damage the ureters, which usually lie directly under the tubes. Often the hemorrhage is alarming, and the quickest way to control it is to throw a ligature around the diseased appendage and remove it. The ligature, in great part, cuts off the circulation, and the bleeding stops; if not, the bleeding points must be sought for and tied. This often requires an enlargement of the abdominal incision, and a crowding up of the intestines with large sponges. All ligatures used are of pure, twisted Chinese silk. Everything being removed, the peritoneal cavity is thoroughly washed out with warm water until the water returns perfectly clear and pure, and finally dry sponges are passed to the bottom of the pelvis until they return dry. Distilled water is used for

all purposes, but when this cannot be obtained, ordinary water, brought to the boiling point and cooled to the required temperature answers very well. If many adhesions have been broken up and there is a large oozing surface in the pelvis, a drainage tube is always put in; this is passed to the bottom of the pelvis and kept there for from two to seven days, as the case may call for, the guide being the amount of bloody serum discharged. I am very fond of using the tube, and have never seen anything but good result from its use. I never inject fluids into a drainagé tube, but keep it perfectly clean and pure by passing small pledges of cotton to its bottom until they return clean and dry; in the interim a twisted cotton rope is passed to the bottom of the tube and acts as a capillary drain; this is removed and renewed frequently; it also keeps the tube from becoming choked up. I formerly used considerable iodoform, but am gradually abandoning it. The abdominal wound is closed with pure, white surgical silk, and the stitches are removed about the fifth or sixth day, by which time union is perfect. The only dressing used is a small piece of gauze over the incision, with a double handful of absorbent cotton, held in place by a six-tailed abdominal bandage.

The after-treatment is very simple, and excepting when special symptoms are to be met, is as follows: The patient gets nothing to eat for the first two days, unless she asks for it, which is very seldom. She is allowed small quantities of Seltzer water to quench her thirst; if this is very great she gets small, warm water rectal injections. This answers the purpose ad-

mirably and at the same time gives the stomach a chance to recover from the effects of the ether. The bowels are opened on the second or third day by salines. After a passage has been secured the patient invariably feels better; the drug carries off the flatus, which always accumulates, and tends to prevent the development of peritonitis, by depletion. On third day, if all has gone well, some food is administered, usually beef broth. I have learned by experience that milk almost always causes more distension and other trouble and I have therefore abandoned its use, preferring to give solid food as soon as possible; this I begin to offer the patient on the fourth day. The dorsal position is insisted on until the stitches or drainage tube are taken out. Opium is never given. I cannot recall a case in which I have used it. It keeps the bowels locked, takes away any returning appetite, causes distension and other inconveniences, prevents the absorption and carrying away of blood, serum, etc., from the peritoneal cavity and masks any symptoms of approaching danger. I believe opium has been the cause of death in many cases of abdominal section; it is being used much less now than formerly. The use of the catheter is dispensed with when possible. I have even waited for twenty-four hours to try to compel the bladder to empty itself before interfering—this, however, must be done cautiously, and I would not advise its general adoption. My patients are usually up in two weeks, but I consider this entirely too early. Where it were possible, I would insist on a full month of absolute rest both for body and mind.

To be sublime one must never depart from the simple. All attempts at ornament with sublimity will end

in failure. When one enters the other departs. Look at the ocean; has she ornament? This applies most to speech.

THE PEORIA MEDICAL MONTHLY.

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EDITORIAL.

THE ROCK ISLAND MEETING.

The newspaper reports of the extent of the flood in Rock Island and the interference with the railroads centering there, were certainly greatly to blame for the small attendance at the recent meeting of the Illinois State Medical Society in that beautiful city. The location, too, was against a large turnout, [especially from the eastern and southern portions of the state. But perhaps the largest factor in all the deterring influences was the general apathy that seems to be growing among the profession, about any and all society meetings, be they city, county, district, state or national. The attendance this year was between eighty and ninety members, while it should have been four hundred to five hundred.

Considerable interest was evinced among those present in the subject of revision of the constitution, reorganizing of the methods of conducting the meetings and the devising of plans whereby new life and new energy may be infused into the society and activity may be obtained.

A committee was appointed for this purpose, with almost unlimited power, and we hope their work will not be without reward.

The profession of Rock Island were most kind and hospitable, and each seemed to vie with the other in effort to make every visitor feel at home and among friends.

There was not heard by a visitor a word of disagreement among the local profession, and they seem most harmonious. The ladies of St. Luke's Hospital Guild added not a little to the enjoyment of the meeting, and their elegant repast given amidst the beautiful scenery on the shores of the famed Rock River will not soon be forgotten.

Dr. Eyster, the local secretary, on whom most of the work generally falls, was most efficient and courteous. Dr. W. O. Ensign, the presiding officer, was without fear of dispute, one of the best if not the very best, the society has ever had. His exact parliamentary knowledge and clearness of rulings were the admiration of all. The society made no mistake in electing Dr. Ensign to that high office.

For the coming year Dr. C. W. Earle of Chicago will stand at the helm, and we hope that he will succeed in his promised endeavor to build up the state society.

**SOME OPINIONS ON THE RECENT MEETING OF THE
AMERICAN MEDICAL ASSOCIATION.**

As plain concise statements of the principle features of the late meeting of the American Medical Association, the following extracts are perhaps better than anything we could offer on the subject:

The thirty-ninth annual meeting of the American Medical Association which has just been held in Cincinnati, was one which may justly be a source of satisfaction to all the friends of the Association. The scientific proceedings included important papers and discussions by men from all parts of the country, and were unusually full and interesting. The subjects ranged from those of the broadest and most general interest to those of minute and special detail. One of the most valuable addresses was undoubtedly that of the president, Dr. Garnett, who gave a clear picture of the present state of medical education in the United States, and urgently recommended the adoption of suitable legislation to regulate medical education by state authority, and to confine the right to issue licenses to practice to State Examining Boards. The details of this address include some points in regard to which there may be some difference of opinion; but the general principles of it can hardly be dissented from.

Other subjects of general interest were introduced and discussed by other members of the Association. For example, there was an important discussion on pneumonia, in the section on medicine, and a sort of symposium upon inflammation at and near the vermiform appendix, in the section of surgery; and a very remarkable paper and experimental demonstration by Dr. N. Senn in regard to determining the fact and location of perforations of the intestinal tube in cases of gun-shot wound of the abdomen. The section

on obstetrics and diseases of women was largely attended, and its work was of the most instructive and interesting character. The same may be said of almost all the sections, while especial mention might be made of the work accomplished in the new section on dermatology and syphilography.

These departments of the Association all showed a high degree of activity, and demonstrated their great usefulness. In the general meetings very little besides routine work was done. The business of the Association was transacted smoothly and satisfactorily. The most interesting subjects considered were probably the conduct of the Journal of the Association, and certain proposed amendments to the Constitution which provide for placing a large part of the administrative business of the Association in the hands of a permanent committee. The latter proposition was laid off for further consideration until the next meeting. The former subject was not discussed openly, although it was very warmly discussed outside of the meeting.

The general affairs of the Association seem to be in good condition. The discord which has so recently exercised an unfortunate influence upon the prospects of the Association seems to be fast disappearing. Some parts of the profession which have been alienated from the National Society appear to have determined to let the past go, and come back loyally to the Association, while the Association itself seems willing to give them a hearty welcome. At no recent meeting has so little of the unfortunate influence of agitation been apparent; and at none has there been so strong evidence of the good sense and warm hearts of the members of the profession all over our land.

In looking over the whole of this meeting, we feel that there is every reason to congratulate the Association and the members of the medical profession in general, upon the cementing of friendship and advancement of scientific knowledge which it has brought about; and we may look forward with bright hope to the future, expecting the American Association to be—as its originators designed it to be—the chief agent in developing unity of sentiment and increase of scientific attainment among the members of the medical profession in America—*Medical and Surgical Reporter*.

THE meeting of the American Medical Association held in Cincinnati during the past week deserves to rank among the most successful gatherings in the history of this organization. The attendance was large and the contributions to the work of sections were fully up to those of previous meetings. The delegation, as was to be expected from the location of the place of meeting, was largely representative of the West, but there was likewise a creditable delegation from the East and South, which was conspicuous from the fact that it contained a number of well-known gentlemen who had opposed the action of the convention in connection with the Congress. The

friends and foes of the late embroilment upon cordial terms, and the disturbances of the past were things of the past. All united upon a common purpose to make Cincinnati a veritable burying ground for former disagreements and a rallying point for the future welfare of the organization.—*Maryland Medical Journal*.

THE meeting of the American Medical Association this year has proved a notable success. The attendance was large and represented every section of the country. Near the center of population, Cincinnati, by the convergence of many railroads, is a focal point for travel, but does not wholly account for the presence of the unusual number of men of mark, particularly from the cities of the Atlantic States. The differences growing out of the organization of the International Medical Congress appear to have ceased with the occasion that gave them birth. In this respect private advices amply confirm the impression received from the public addresses. The assiduity of a few mischief-makers has not availed to stem the current that sweeps the Association into its ancient course of national good feeling. This consummation is of no small importance to the future welfare of the Association.—*Medical News*.

A NEW FOREIGN HUMBUG COMING.

The editor of the *National Druggist* in referring to the gratuitous advertising which our medical journals are giving to foreign “antiseptins, antipyrrins, and other antis,” invites attention to Gawalowski’s “merciless exposure of a new compound which is getting ready in Germany to make a descent on Europe and America in the style of

its predecessors—the antiseptic kreolin, of the wondrous value of which the advance guard of certificates have already commenced to appear in our journals. Will the latter be warned in time, or will they swindle themselves out of thousands of dollars by giving it the usual American welcome and gratis advertising.

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ORIGINAL COMMUNICATIONS.

INFLUENCE OF DIET.

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At the late meeting of the American Medical Association held at Cincinnati May 9th, papers were read by Drs. Earle of Chicago and Atkinson of Philadelphia on diseases of children, and in the discussion that followed it was held that "there was no good substitute for mother's milk, and that there was great danger from early weaning."

"For very young infants in lieu of mother's or nurse's milk, cream with barley, rice or oatmeal water to which milk, sugar, common salt, phosphate of lime or soda, or lime water in small quantities is added, seems to agree best."

As to the first proposition that there "is no good substitute for mother's milk," is denied in toto. Furthermore, the writer will attempt to prove that an artificial food for infants can be, and is made, which is vastly superior to sixty per cent. of the maternal nursing.

There are certain objects to be obtained by the injection of pabulum other than to "eat to live," whether in the octogenarian or the babe. In the babe there are *all* the tissues to build up, beside *certain and specific ones* that the learned members of the Association have in all probability never considered. That may seem strange, but is it not true that the profession to-day

do not take into consideration whether there are certain tissues that have been neglected in receiving nutrient matter? Although water is so important an element of food, all receive their due share; so they do of the albuminoids and nitrogenous matter, *but not of the calcareous salts*.

"For very young infants in lieu of mother's milk, cream with barley and rice water" is recommended. What nutrient matter can be found in "rice" or "barley" water other than mostly starch? Almost nothing else. This is recommended for "young infants." Let us examine just how starch and cane sugar are disposed of, and then see if such pabulum is the "best food for young infants."

The starches are disposed of or digested by the amyolytic ferments of the saliva, pancreatic and intestinal juices. It is a fact that a child under one year of age does not secrete but a very small amount of these fluids, especially of the saliva and of the pancreatic juice. If this is so, how can such an infant digest a material for which there has been no provision made, until a more advanced period of life? Since "young infants" *cannot* digest starch, it follows that starch foods should not be injected. The

same is true though in a less degree of cane sugar.

But, starchy foods can be so prepared that "young infants" *can easily digest them!* This is done by converting the starch into *Dextrine*, by baking the starch at a temperature of 350° Fahrenheit, for some eight or nine hours. By the natural course of digestion, starches are converted into dextrine, and then from that into soluble starch. Manufacturers have perfectly imitated this as shown in this paragraph, except carrying the conversion into malt or maltose, *which is a step too far.*

Malts. A step too far; is that malt, maltose, maltine or cane sugar undergo in the stomach a fermentation, vinous or acetous, and thus *souring in the stomach*, they produce heartburn, gastric erosions, and when this sour pabulum enters the duodenum and lower digestive tract, they rasp, scrape and scratch their way along establishing blenorhoeas, diarrhoea and enterocolitis. This cannot take place when the carbo-hydrates are ingested as dextrine. The acid which appears first in digestion is lactic acid and later on hydrochloric acid. These acids so alter the easily changing maltose-sugar and cane sugar as to sour them before they can reach the intestinal tract.

Dextrine goes through the stomach unchanged, so that when it does reach the amylolytic solvents, in the duodenum and intestinal tract, this form of the carbo-hydrates is easily converted into maltose then; they are readily absorbed having got beyond the

lactic and hydrochloric acids unchanged —soured, ready to be taken up or absorbed into the circulation and appropriated.

With these facts in regard to the starches and malts, where can the wisdom exist of ingesting barley and rice waters?

Besides, there are other and very weighty reasons why such poor food as this should not be given to infants, for there are certain tissues that they cannot nourish in the least.

Human milk or artificial feeding should be capable of supplying nutrient matter to every tissue of the body; but few nurses do this without special feeding.

The three petrous tissues found in the teeth have received no more attention from the profession than though there were no such textures to be provided for, and the consequences are that it is rare to find a child of ten years of age that can show the four six-year molars in their places. The bicuspids which come later are frequently beyond the domain of repair at the thirteenth year. The minor causes of the decay of the teeth are of but little consequence outside of the great fact that they are deficient in lime salts. The teeth are composed of calcareous matter and soft solids. It is well known that it is the lime salts that enables them to resist attrition and decay. The facts are that by methods of today, the teeth are being starved out of existence. No provisions are made for a liberal supply of the inorganic constituents in the food partaken of. It

is even difficult for the muscular tissues to get their supply of from 18 to 20 per cent.

There should be an average of 80 to 82 per cent. of calcareous matter in the teeth; enamel 98, dentine 78 and cementum 70 per cent. But there are many teeth that will not make an average of 65 per cent. Is there any wonder that they decay so rapidly? Immediately upon conception, the mother ought to begin to feed herself liberally upon food that contain a large amount of the calcareous salts. The teeth begin to form as early as the sixth week and keep forming through foetal life, babyhood and as late as the twentyeth year. The only source from which such a supply can come that is designed for easy digestion and ready appropriation, is from our cereal foods. But not as they are ground and prepared for market to-day; far from it. It is in the bran, the outside of these grains, in which resides this calcareous matter, yet it is bolted out and thrown away. All the bread foods of the mother, nurse, babe and youth should be made from the meal product of the cereal food partaken of, such as Graham bread brown bread made of Indian and rye meals, rye bread, corn bread constructed out of the meal products. If this is honestly followed out it will insure good, strong decay-resisting teeth.

Human teeth do not build themselves up but once. Hence it is when they are building that they require the lime salts. It is impossible to get but a very limited amount of calcareous matter into teeth *after* they have erupted.

If the child is fed naturally then the mother must partake of such food as will furnish the inorganic constituents for the petrous tissues. No mother or nurse will do this unless fully instructed by the attending physician. In fact, they do not know the necessities of the case.

Now there are many children who are not so fortunate as to be able to have first-class maternal nursing; and indifferent maternal nursing is not much better than the barley or rice water nothingness. How are such children to be fed? Certainly not on starch; nor food devoid of the lime salts and a good share of the albuminoids. There are some nine infant foods on the market. Three of them are "milk foods," which are by far the best. They are Carnrick's Soluble Food, Anglo-Swiss, and Nestle's Food. Carnrick's Food contains 18.22 per cent. of protein substances or nitrogenous matter, and human milk 17.08 per cent., which are very important element in a natural or artificial food. 2,991 per cent of lime salts or petrous tissue builders, and its ease of digestion, another important item, is 16.45 per cent. Anglo-Swiss, proteins 12.38, lime salts 1.95, ease of digestion 11.20 Nestle's, respectively, is 11.46, 1.75 and digestion 11.09.

Two are known as malt foods, Horlick's and Mellin's. Maltose is quite as liable to ferment in an infant before it reaches the duodenum as is cane sugar. Horlick's has of the albuminoids 11.30 per cent., salts 2.76, digestion 10.85. Mellin's, of nitrogenous matter 8.34, salts 3.53 and ease of di-

gestion 7.38, more than two and one-quarter times more difficult to dispose of than the first named food.

Starches.—Of starch foods there are Wells, Richardson & Co.'s, whose proteins are 9.05, salts 2.26, digestion 8.35. Dr. Ridge's Food, 8.76, salts at low as 0.48, digestion 7.97. Imperial Granum has of nitrogenous material 10.73, tooth builders 0.37 and digestion 9.55.

For reasons stated before, the starch and malt foods are poorly adapted for the feeding of infants. A first-class wheat will deliver from 10 to 12 per cent. of nitrogenous matter. Those foods that have been classed as milk foods that do not contain over from 12 to 13 per cent. of protein, or nitrogenous matter, cannot of necessity contain much desiccated cow's milk, and will not serve the purpose as well for a general tissue builder.

The qualities that are wanted in an artificial food for infants is a large per cent. of nitrogenous matter, as high, or greater, than that of human milk. A liberal supply of the lime salts for the petrous tissues, which have been so fearfully neglected ever since these *bolling* flouring mills have come into existence, and a food that will digest as easy as human milk.

I desire to put on record that it is my firm belief that better results can be obtained for *all* the tissues, by the use of well balanced artificial food for infants, than can be had by the methods now in use, to furnish human milk

rich in such materials as shall insure a thorough nourishment of every tissue and *especially the petrous ones.*

If cow's milk is offered as a substitute for human milk, its tough casein ought to be partly predigested with pancreatin. The quantity of casein can be reduced by water, but what casein there is left is as difficult to digest. Cow's milk contains nearly 300 per cent more casein than does human milk. Casein of cow's milk is at the lowest estimate made by several different analysts, 3.022 per cent. of mass. Woman's milk, averaged from 43 different women by Meigs, is 1.046 per cent. The casein of woman's milk is more spongy or flocculent than that of cow's. No child that the writer has seen, in an experience of some thirty years, can fully and easily digest cow's milk.

The lime salts should be ingested by the pregnant woman liberally, from breads constructed out of the meal products of the specific grain used, to the intent, that there may flow through the umbilical cord, to start and assist the first tooth germs, a liberal amount of the lime salts as nature has prepared for them. The same pabulum should flow through the mammary glands and from out of the bottle. If this is conscientiously followed out in each situation, it cannot fail to produce a temporary and permanent set of dental organs that will not melt and decay away as is so common at the present time.

SOME UNCOMMON MANIFESTATIONS OF MALARIAL POISONING.

BY W. T. HALL, M. D., TOULON, ILL.

(Read Before the Military Tract Med. Soc., at Peoria, May 1, 1888.)

In presenting this paper upon malaria to you, I do not intend dwelling upon that form of malaria we had in this country in those good old halcyon days when every one had to have the ague and the itch at least half the time before they were fashionable enough to be allowed to move in good society. And I want to say that was about the only diversion we had. When we were not shaking we were scratching, and it was truly pleasant; it broke the monotony of life and made it far more endurable. Neither will I dwell upon those cases where the symptoms are so positively pronounced that a wayfaring man though a fool should not err therin.

My intention is to present the effects of malaria in some of its subtle and most obscure forms and which are becoming more manifest in their demonstrations in my section of the country in the last few years.

I read a paper before this society about two years ago, in which I gave the full history and progress of twenty-two cases. The most peculiar feature in these was the haematuria with the most distressing tenesmus in voiding a scanty amount of urine. At that time I referred to the utter uselessness of any medicines to give relief until the last of the malarial poison was removed. I tried every remedy of repute with no avail. I then reasoned in this way: What is producing this wonderful phenomenon? The rest of these symptoms are purely malarial, and this is but a

sequence.. Now how can I hope for relief from the effects until the cause is removed. When I lost no time in treating any separate trouble, but bent my whole treatment to eradicating the cause, I found my cases improved far more rapidly and at the same time more comfortably.

Of late years quinine has been pronounced by many able men as being an abortifacient. In their hands it may have been. In my hands it has proven just the opposite. In the past two years I have treated five cases of threatened abortion, and in three where the os had dilated and the membranes presenting, with regular contractions of the longitudinal fibres of the uterus. When first called, I gave anodynes with apparent relief. My patients had perfect rest until the next day at the same time, when to my surprise I was summoned again. I repeated the anodyne treatment for immediate relief and at the same time I assured my patient I thought I could ward off a return of the trouble. It is needless for me to tell you I produced decisive cinchonism in all these cases for the first twenty-four hours and kept them under the influence of quinine for about two weeks without them showing any more signs of aborting. I afterwards attended these five cases at full term, and delivered them of healthful children. It may be surprising to some of our sugar coated gentlemen who have worked so zealously to prejudice the

minds of the public against the use of quinine, but I want to tell you none were deaf or dumb, none of their heads were too large unless they got the big head afterwards. The doctors, thank God, are not responsible for the big head unless it should be in our own families.

In summing up these cases I will say this: Had it not been for quinine they would have aborted. The periodical contractions were unmistakably of a malarial origin. Two of the cases had aborted before under like circumstances, and I have never seen a case where all the threatening symptoms were so pronounced as they were in these cases, which did not go on to the expulsion of the foetus. I take the ground that quinine when indicated is not an abortifacient, but upon the other hand, is an anti-abortifacient.

About a year ago I was consulted about a boy some twelve or thirteen years old who seemed reasonably well. The history of the case showed no family taint and apparently no cause for his trouble. He complained of the ringing of the church bell. When the bell would ring he would place his fingers to his ears and almost go into convulsions. Of course I diagnose hypersensitiveness of the auditory nerve, but the cause I could not make out. I put him upon nerve tonics for general treatment, with nerve sedatives locally. I kept my patient upon this treatment for about two weeks, and instead of improvement he kept getting steadily worse, so I had to send him into the country where he could not hear the ringing of the bells. Upon a more careful examination of the case I found

It was the ringing of the bells at 7 p. m. that disturbed him; at other times, while it disturbed him, it was not unbearable. I then made up my mind to give him the pleasure of hearing another kind of ringing, which I did, and with the ringing I produced came perfect protection from the bell. Now, gentlemen, if this was not a case of hypersensitiveness of the auditory nerve due to a malarial poison, what was it? If it had been due to any other cause would quinine have removed it in twenty-four hours?

Some years ago I had a young man who had hypersensitiveness of the optic nerve. The least ray of light would nearly knock him off his chair. He was seen by many of the best physicians in our part of the country, and all the treatment recommended seemed to give no relief. His intense sufferings would commence with the first rays of the sun and would abate as the sun went down. He had taken all kinds of nerve and general tonics, his liver was acted upon; in short, all the organs watched with care and his surroundings all any one could wish for. In spite of all this he grew gradually worse. This lasted about three months, and during that time he had not seen a ray of light without the most intense pain. While he was my patient, and although I could not agree with the consulting physicians, for I claimed all the time that it was one of persistent, intractable malaria, I had to carry out the treatment recommended by others. Finally I took him to Chicago to Prof. Holmes. After a very careful examination he said: "No organic trouble of the eye exists whatever. Malaria,

in my opinion, is the cause, and I recommend quinine in large doses, attending if need be with liq. potassi arsenitis."

We came home, I put him on that treatment, and within ten days he could see well, and within three weeks could stand as much light as I could. I saw the patient a few weeks ago (he is now a banker in Nebraska), and he told me he has never been troubled since. Before going farther, I will say this patient took one and one-half drachms of quinine every twenty-four hours for the first week without producing but slight cinchonism; then he kept taking less, until ten grains would be felt more than the ninety grains in the first place.

Now, did not the tolerance of the medicine indicate the necessity of its use?

About the 15th of November last a hotel keeper consulted me in regard to a bloating he had in the abdomen. My son, Dr. Charles Hall, of Kewanee, was present, and we gave him a very careful and thorough examination. He is a man of good habits, quite spare, always had reasonably good health, has had some functional derangement of the heart's action, but never so bad as now, no pain, bowels regular, tongue clean, appetite good; in short, complains of nothing except the bloating; the distention was general, resonance normal, no fluctuation, and it felt natural to the touch.

I first put him upon a general tonic; gave podophyllum and mercury, and followed this with a saline cathartic. I admit the reason I gave this treatment was simply because I did not know what else to give him, and I thought of

giving him a shot-gun dose. I might wake up some organ and make it show its hand. Well, he tried that for three or four days, and with each day he would have to let out another button. He would sit and cross his hands over his belly as happy as an alderman. I told him as long as he was a hotel keeper and everyone knew what kind of a belly he had when he came there, he had better keep it for a sign, but he said, "I am getting so full I can't eat or lie down to sleep."

In this case there was no pitting upon pressure, no ascite, no eructations of gas; in fact, nothing passed either by mouth or rectum that would show what it was that was filling him up. I tried to think of everything from an immaculate conception clear down, and the more I thought the less I knew. Finally I found the swelling commenced about 10 a. m. and was at its height—a regular boom I suppose it would be called now-a-days—at 4 p. m., and by 6 p. m. it would nearly disappear.

I took for a starter 10 a. m. I made up my mind I would give him one drachm of quinine between the hours of 6 p. m. and 10 a. m. of the following day. Now, what I want to say is this: Either that belly was about ready to go down or else that quinine made it go down, for down it went. To satisfy myself that it was the quinine I stopped giving it for two days, and it commenced to rise again. I then put him upon quinine for two or three weeks and he now has as respectable a belly as any man need want.

These cases, gentlemen, presented as I know they have been, in a crude form, I think are sufficient to bring

before this society the two points I wish to make, namely: The exceeding scrutinizing watchfulness it takes on the part of the physician to recognize this subtle agent which shows itself in every conceivable garb and often so reluctant about losing its relentless grasp, and so surely to reappear even after you think you have it subdued.

The second point is: Give the remedy irrespective of the size of the dose until you get the desired effect, as in one dose ninety grains were given in twenty-four hours; afterwards as great, if not greater, effects produced from ten grains.

I would not think of insulting the intelligence of the members of this society by advising certain sized doses under certain conditions. Each case is a case unto itself. Each physician in attendance is the only competent judge. Watch your patient the same as you would a thermometer when it has reached a certain point, take due notice and govern yourself accordingly.

Another thought in presenting these cases was, it might perhaps awaken in the minds of others some other subtle agent which entered largely into and perhaps was the controlling influence in other diseases.

Allow me to digress here to say: I fear we as a profession are fast drifting into a routine way, not only in prescribing but in the examination of our cases. We are prone to jump at conclusions, directing our treatment to meet the indications of the effects rather than seeking for the true cause and removing that. This we all admit is wrong. It is an injustice to our patients as well as to ourselves, and more than all, it

falls short of fulfilling the mission and intention of the noblest profession known to man. That diseases are undergoing rapid and radical changes in our country is an undeniable fact. That it takes more professional skill, based upon a constant, thorough indefatigable investigation upon our part in order to arrive at the true pathological condition is beyond all question of controversy.

Why, I can remember when a boy going with my father from house to house, and it was as rare to find any complications such as I have mentioned as it was to find one able to pay for services when rendered. The older members of the profession will, I think, bear me out in the assertion that for years the prevailing diseases, which as a rule were pure, unalloyed malaria, remained the same, and the only change in the treatment was the difference in the size of the dose.

How different now! In early days it was the exception to find complications; now it is very rare not to meet with them. Right here a question naturally presents itself. Is it changes in the agent whatsoever it may be producing these peculiar phenomena, or is it due to changes in our systems, especially the nervous system. It seems to me these questions are vital ones to us, as a profession and the constantly increasing repetition of these cases calls for a reasonable, rational answer from us.

I do not ask these questions for pastime, for I well know that a fool can ask questions that a wise man cannot answer, but I ask them feeling the immediate necessity for a more thorough

systematic investigation upon our part as the guardians of the safety and welfare of the public.

In the latter part of January last pronounced cases of winter cholera made its appearance; vomiting, cold extremities, tenesmus and all the symptoms of cholera morbus of a violent type. In many cases blood and mucus to the amount of two quarts in six hours would pass. About the same time a catarrhal fever with, a bronchial trouble, and in many cases pneumonia with a peculiar spasmodic cough unlike the cough or the breathing of true pneumonia. Blood and mucus passed not only from the nose, but also in the expectoration in large quantities. In very many cases a rash, unlike anything I ever saw, showed itself. The rash was circumscribed, the edges somewhat elevated, intense itching, as in scarletina. The eruption seemed to be a compromise between scarletina and measles, an amalgamation if you please. The pulse, tongue and temperature precluded scarlatina in my mind, as well as the form of the eruption. Scarlatina and roseola were no protection from this disease; neither do I think it will protect me from either of those diseases.

In some families a part of the number would have the disease and others escape. Contact was not necessary, so I looked upon it as being infectious rather than contagious. The desquamation was the small brany scales rather than the peeling off as in scarletina. In all my cases—and the number was 117—I found not only a periodicity, but a very marked one.

Except in the eruption, this would last from forty-eight to seventy hours. The pains, which were of a migratory character, were intense and at times almost unbearable. The patient would be taken with the pain in the hollow of the foot, the heel or the calf of the leg. The pain would be so intense as to cause profuse perspiration. In a few moments this pain would be transferred to the stomach, supraorbital region—generally on one side—to the uterus or the inferior maxillary glands; the ears were frequently involved, ending in aural abscess.

Opiates, chloral and the bromides in large doses would not give relief. Expectorants and arterial sedatives with antispasmodics were tried with like results. Quinine in five grain doses every two hours was given, but failed and not until quinine in from twenty to forty-five grains every four, six, eight or twelve hours was given, did I get the effect desired.

When a small boy, I remember my father treating cases of malarial troubles in this country as long as 1844. Perhaps there are those present who remember cases of a species of erythematous eruption at that time or later.

The eruption we have been having more nearly resembles that than anything I ever saw or can describe.

The question I wish to present are these: Is malarial poison producing these troubles? Is the water in fault? If so, why are those cities not affected with surface water troubled, and at the same time account for the influence quinine has in these cases, and why should quinine in antipyretic doses re-

lieve the conditions when the febrile excitement does not indicate those doses? Can a malarial poison so permeate a

system as to produce these symptoms and yet not indicate antipyretic doses of quinine?

THE DIAGNOSIS AND TREATMENT OF ABSCESS.

BY J. H. COULTER, M. D., PEORIA, ILL.

Read before the Military Tract Medical Society at Peoria, May 1, 1888.

I have thus limited my subject for several reasons, some of which will at once be apparent; and the result of the limitation may be only too certain proof that it should have been yet more limited. The impossibility of thoroughly discussing the entire subject of abscess in this brief time is also apparent. I leave the etiology of the subject, itself a most interesting subject of study, for another time. Neither will I enter into the discussion of such questions as to whether cocci are or not always present; nor will I even attempt to enumerate the various causes of abscess, whether or not there is in certain individuals a predisposition or tendency to abscess; the different kinds of pus, membranes, etc., are all interesting, but voluminous.

Then what are the points that are salient, for we cannot yet say pathognomonic, in the diagnosis of abscess, acute or chronic?

The first question we should determine if possible is the exciting cause, and in this we will sometimes, indeed frequently, be disappointed, for none will be found even with the most careful scrutiny. On this point authorities differ, some affirming that those which present no exciting cause are most frequently chronic, while others say their

spontaneity is almost pathognomonic of their acuteness. In my experience it is a matter of no great importance either as determining their chronicity or extent, but in many instances it may very materially affect the treatment. I have very frequently been unable to discover the cause in both acute and chronic. I dwell thus particularly on this point, because we cannot always tell whether it is acute from its duration so far as its recognition by the patient is concerned; and I wish to determine this particular if possible, because I propose a treatment different for each. Acute abscess differs from chronic in the following general particulars, and in special particulars, as the case may individually present, and these are only thus, and as such of any significance.

The symptoms common to most abscesses are swelling, redness, pain, tenderness and fever. These may be all present or may be only in part. Swelling is least frequently absent, then redness, tenderness, pain and fever, in order. In this I am sustained by Gross and Bryant, while Druitt, Erichsen and Liston place pain and fever next to swelling. They are all, however, of so nearly equal importance that we should not fail to note their presence or ab-

sence in any case. Any symptom which is present may usually be noteworthy from the fact of its intensity, due doubtless to the violence of the pathological action.

The swelling is at first hard in acute abscess, but in a few days begins to soften at a point, and soon more or less fluctuation can be detected over the entire enlargement. In this there is a peculiar sensation produced on the fingers, it is similar to that from a bladder filled with some liquid. In palpation of suspected abscess use as many fingers as possible. This swelling is different thus from that oedematous condition often found in the extremities, and it differs from diffused blood under similar circumstances. But I propose giving the various differentiations later, and will at that time give these minutia.

In all abscesses acute in character there is a marked redness of the skin, which deepens as the abscess develops or comes to a point. I consider this symptom an important one both in the determination of its chronicity and extent; and by it too, in many instances we may determine the existence of scepta in the abscess cavity, fine white lines indicating such, and by these we may determine the course and extent of the incision if one is to be made.

Pain is usually present to some extent in acute cases, but its entire absence is frequent if the pus formation is slow. Some have said this was due to the tension, but I am inclined to think it is as frequently and in a greater measure, due to the cell disturbance of the nerve filaments, because change of posture gives no relief; then too

where the nerve trunk passes through the sac it will sometimes evidence an inflammatory action of a corrosive nature.

The localized tenderness is of much the more value in chronic abscess, for in the acute it is so variable that it is of little diagnostic importance. However in chronic cases it is of import, as I shall attempt to show later.

The fever in the acute is also a very uncertain and variable quantity. Depending I think much more on the temperament of the patient than on the abscess proper. If there is the worry and concern characteristic of a nervous constitution, then there may be expected those exacerbations of fever consequent upon much more serious attacks in sanguine patients; differing from the chronic in the irregularity of its appearance. The prognosis of acute abscess is favorable as to life under the treatment of almost any surgeon or physician who can diagnose them and is not afraid to use the bistouri, lancet and probe. Acute abscesses rarely subside themselves, *i. e.*, they are rarely absorbed. However I have seen in three different post-mortems undoubted evidence of old abscess; two were hepatic and one renal; though of course I cannot certainly affirm that they were never treated for the condition. Yet there was nothing in the history of either case or the condition of the patient to indicate that such a diagnosis had been made, and in each case death resulted from another cause entirely. One from cancer of the womb, one from typhoid and one from oesophageal stricture. The most frequent termination of the acute if left alone

and it be deep seated so preventing external bursting, is development into the chronic. If it be superficial enough it will come to the point and burst; and to this cause I may say is attributable many fistula, sinuses and necroses. Of course however the most usual course if left alone, and is superficial at all, is by bursting and then slowly healing, oftentimes without the knowledge of the family physician, much less the consultation of a surgeon.

Neither can I now further enter into a discussion of the causes of chronic abscess, and many other questions of like interest and importance;—only this, admitting their existence how can we distinguish them? Almost universally slow in formation. If we include so-called cold abscess with acute, then the chronic are always slow in forming, but not so if we make chronic to include cold. There is here however no redness. Often, though depending on the location, inflammatory action is evident. Then what have we left for diagnostic symptoms—only this swelling, pain, fever and sometimes fluctuation, and very frequently all but the first is absent. The swelling when present does not differ from that of acute. The pain is most important when located in an internal viscus; it is then almost constant; severe especially after exertion; slightly tender on pressure over the most accessable spot. Acute exacerbations of all symptoms present will frequently occur, and coincident with these in many cases may be noted a sensation of the bursting of the cavity with a partial or complete emptying of its contents. Then ensues a period of comparative rest until the cavity again

fills up. Usually the abscess is more superficial and a greater or less amount of tumefaction will be apparent. For a long time this will remain somewhat in *statu quo* as our legal brethren are wont to say; then a slight softening and fluctuation. If it exist in bone, then the pain is very severe. Also, the following symptoms in the main prevail in all cases of chronic abscess, whether it be encapsulated or a burrowing variety, following the course of the arteries, nerves or muscular sheaths: The fever consequent on chronic abscess is an important symptom. Barring other causes and complications, it is apt to rise in the evening, even if there be no pain, and with the pain if it be severe. This amounts to 2° or even 3° and higher in severe cases. Quinia and other antipyretics seem to accomplish nothing. Frequent with the fever is a headache, yet not such a headache as is produced by a disordered stomach or bowels or loss of sleep, lasting for three or four days, usually frontal and almost blinding in its severity. I do not find this symptom mentioned by any of the authorities to which I have had access, but I consider it one of the most important.

Fluctuation is not frequently of value unless the abscess be very superficial or pointing toward the surface; then by very careful manipulation, as before described, one can sometimes distinguish it. I will include further symptomatology, in the most important points in differentiation which I will briefly allude to and then proceed to notice the treatment.

Abscess may be confounded with the following conditions: Aneurism, em-

pyme, fatty or solid tumors, hernia, serous collections in the bursa, spinal abscess, hip-disease, or other peculiarities as will occur with the individual. The most important point in abscess diagnosis is the differentiation, for by it we obtain a proper or a fatal start in the treatment. If from lack of care or knowledge we should open into an aneurism or hernia, or attempt to aspirate a neoplasm or fatty tumor, our chagrin would not likely be the only bad result. We might carelessly subject our patient to a needless fatality. We, however, with due caution and proper care can make some exclusions and arrive at a practically certain diagnosis:

In *aneurism* we have the pulsation as the most marked symptom, it is usually sudden in its onset, then there is a consequent disturbance in the arterial and venous circulation which is easily detected. By pressure on the artery on the proximal side it can be easily reduced. If aneurism, it cannot be moved in any direction away from the artery from which it springs. However, in some cases of suppurative aneurism with severe inflammation, even puncture with the aspirator and obtaining pus would not certainly prove it to be an abscess, and an exploratory incision must be made.

In *empyema* we have what may be considered an abscess of the plura. These sometimes (though I have never seen a case) follow the abdominal muscles, and by gravitation soon resemble a hernia or psoas abscess, or even hip-joint disease. Then empyema usually follows an acute attack of pneumonia or pleurisy.

A *fatty tumor* is hard, often nodulated, not compressible, time alone usually being sufficient; painless, or nearly so, quite freely movable, and encapsulated, though an exploring needle must frequently be used to certainly determine its character.

Hernia requires care in its diagnosis, and whenever we have a suspected abscess in hernia territory, it should be a herald for special vigilance in the diagnosis. The principal point in the diagnosis of hernia is its impulse on coughing. This is almost invariable. Then, too, the hernial contents are reducible usually, even if the sac is not so. The symptoms of strangulated hernia are isolated sufficiently to preclude the likelihood of any mistake in that direction. In femoral hernia and others there is a soft and pliable feeling, a slow return on pressing, and its situation in relation to the femoral vessel will enable us to exclude hernia.

Serous effusions and hydatid tumors so nearly resemble chronic abscess many times that only the close examination of the contents after puncture can certainly determine the character of the condition.

Hip-joint disease may simulate an abscess very closely. Pain, however, is much more constant, tenderness prominent in and about the joint, the peculiar curvature of the spine when the knee is straightened, and the well-known symptoms will enable one to make the differential here, if it should be necessary. It is a form of abscess which rarely occurs.

But the great diagnostic as well as differential element in our treatment of abscesses is the use of the exploring

needle or aspirator. With a little care they are harmless and almost painless, and many times of incalculable value to the surgeon.

Having now diagnosed an abscess with at least a reasonable certainty, what is our course of treatment? In acute cases and those of small dimensions, those beneath facia, among tendons or in the hand or foot, should be thoroughly opened, thus admitting the escape of the irritating cause as well as the contents of the sac. It may be summarily stated by saying free evacuation, antisepsis, applications inducing healthy and speedy granulation, ~~keep NO~~ ^{and R} ~~effort~~ ^{effort} ~~hold~~ ^{hold} ~~in~~ ⁱⁿ ~~repaired~~ ^{repaired} ~~by~~ ^{by} ~~incision~~ ^{incision} and drainage. Just now, however, it has again sprung into favor, and I venture the opinion that it will remain so as long as things medical do usually. In those sacs which are opened and the sac dissected out, the cavity may be well dusted with iodoform and antiseptic lint or jute dressing applied, and the cure is practically certain, though slow, and also has the disadvantage of leaving a large scar. Nor can this plan always be safely followed, even with the most careful operator, aside from its inherent difficulties, when composed of several sacs. All these difficulties, however, seem to me to be overcome in a measure at least in every case, by the plan of Dr. Moorhof, of Vienna. It has been adopted by the French, who claim for it most excellent results. Lately several American surgeons have claimed for it unexcelled results. The plan is as follows: With an aspirator or trocor evacuate the cavity of pus as thoroughly as possible. If there exist sinuses or

renal, splenic or pleuritic. This last method is German in its origin, and so far as I can learn remains so.

fistulous openings into other sacs, they can be reached as well with the needle as with the knife under careful manipulation. After having evacuated the cavity, thoroughly wash it out with a carbolic or corrosive chloride solution, probably the latter, until the water becomes clear. Then inject a solution combined with alcohol. The ether, however, should hold in solution iodoform in the proportion of thirty grains to the ounce. It may be used after the following prescription:

Ether fort	3 ounces
Iodoformi	2 drachms
Alcohol	1 ounce

Prof. Tarrillion in speaking of the method says: "The quantity of liquid introduced into the largest sacs should not exceed four ounces," fearing too great an absorption of the iodoform. The liquid after a few moments is allowed to flow out, yet a certain amount will remain in the cavity, by which the entire lining membrane becomes coated. Under this treatment I have found that there was quite a painful attack, accompanied by some fever and headache; further than this nothing untoward was observed. In a few days, if one injection has proven sufficient, we will be able to discover evidence of resorption and the cavity to grow less. Dr. Terrillion advocates a repetition of the operation in six or eight weeks. I have repeated it only once as yet, but in that case I waited between three and four, the abscess being small and superficial, yet particularly obstinate because consisting of two sacs, one of which had evidently not received the benefit of the medication.

The time required to heal any abscess depends: 1. The constitutional condi-

tion of the patient. 2. The extent of the sac. 3. Whether visceral or muscular. 4. And in many cases the method of treatment employed. In opening acute abscess the treatment will frequently effect but little for a few days; then a day or two of thicker, darker and more abundant secretion. But soon it begins to diminish in both quantity and density, and the color becomes lighter as the quality decreases. In my experience the color never, or seldom, assumes a lymph-like appearance. Some quasi authorities say that this condition only is a positive sign of healthy granulations in the sac. But I am inclined to think that while when present it is a favorable symptom, yet I do not consider it even usually present nor necessarily so to a favorable result. I have seen abscesses heal up and for the last few days only a drop of thick pus could be pressed out, showing that the sides of the sac have become agglutinated and are already adherent.

I wish briefly to relate two cases in which I have used aspiration and the iodoform-ether injection. I have had repeated failures with carbolic injections, or very tardy healing. I have failed in three out of five times in the use of alcohol injections; incision is not always practical, nor can we always persuade the patient to submit to such an operation. Hence I am free to admit a partiality to the iodoform-ether process so long as its results are as satisfactory as they have been in the nine times I have used it:

Case 1—T. J. F., aged 58: Has had pleuritic discharge for two and one-half years. When I called to see him he

had just vomited more than a pint of pus; complains of severe pain in right lung for two months or more. This has been the third time it had so bursted, each time during a paroxysm of coughing. He expressed great relief as soon as the excitement of the immediate attack had passed. Six weeks later he came to the office complaining of a return of the pain and coughing. On examination I could now much more clearly distinguish the pus cavity. I gave him tonics and a relief for the cough, at the same time advising aspiration. He would not consent to this and continued the treatment he had previously followed for about ten weeks, at the end of which time he had become extremely weak and emaciated. He requested now the operation I had asked before. I then with the aspirator and trocar drew off considerably over a pint of pus, thoroughly washed it out as I have before described; then injected about three ounces of the ether-iodoform solution, allowing it to remain about five minutes; then withdrew it as

much as possible. For several days the symptoms were not very encouraging—a fever and slight evidence of shock—but these soon passed away; in a week he began to improve, and continued to do so. The cough ceased almost entirely, no more headache and general appearance much improved. From 110 pounds he now weighs 164, and to-day he is shingling his house.

Case 2—Miss C. M. S., aet. 21: Has suffered for four years from severe pain in region of the spleen; only point of particular interest outside of the ordinary symptoms was the distinctness with which she described and felt the occasional bursting of the sac, which I discover undoubtedly emptied into the colon. I waited for four weeks after it had bursted and then operated as before. It is now seven weeks since, and although the pain is not entirely gone, it is very materially decreased. The headache has not returned but for one day since the operation and a general improvement augurs complete recovery in a short time.

SELECTED ARTICLES.

PELVIC ABSCESES AND THEIR DIFFERENTIAL DIAGNOSIS.

BY ARPAD G. GERSTER, M. D., NEW YORK.

GENTLEMEN:—The patient before you, a man about thirty years of age, has an extensive pelvic swelling located to the inner aspect of the os ilium on the right side. It was preceded by a sickness which the patient called lum-bago, and also by lead poisoning, which caused considerable intestinal trouble. The doctor who brought the patient says he punctured the fluctuating swelling and found pus. Therefore, the answer to the question as to the charac-

ter of the swelling seems to be clear that it is an abscess. As the swelling developed gradually, it is probably called a cold abscess.

Before proceeding to the question of treatment we will have to find out, if possible, the cause of the abscess. First of all, we may have had to deal with a perityphilitic abscess. The patient has had bowel trouble accompanying lead colic. The cæcum is one of the parts involved in lead colic, and one of the

most constant symptoms is constipation. This patient has been constipated. There may, then, have been an enteritis at the cæcum, an enteritis which extended to the veriform appendix, and which led to agglutination, perforation and the formation of an abscess in the right groin. This may have worked its way in the usual manner, raising up the peritoneum until it came beneath the transversalis and the skin where it now is. It was at first, according to all appearances, a retro-peritoneal abscess.

Another possibility in the case is spinal trouble. He has suffered from what he calls lumbago. It may be, therefore, that the abscess has had its origin on the lower portion of the spine. Cold abscesses forming there sometimes work their way exactly as do retro-peritoneal abscesses, and appear above Poupart's ligament beneath the skin.

A third possibility is disease of the right kidney, a perinephritic abscess, for the pus in these cases occasionally, but not as a rule, works its way beneath the peritoneum until it reaches the integument above Poupart's ligament. These abscesses generally point in the loin, but while that is the rule there are exceptions which should be noted, just as exceptions to the rule that perityphilitic abscesses point above Poupart's ligament are occasionally seen. I had such a case a short time ago, in which the question was not decided until after the operation whether the abscess was perinephritic or perityphilitic. It had pointed in the loin. After the operation it became clear that the case was one of perityphilitic abscess. There was nothing abnormal about the kidneys.

We shall have to carefully examine this patient to determine whether he has kidney trouble, spinal or pelvic trouble, or intestinal trouble as the cause of this abscess.

When asked to state where he felt he felt his lumbago, the man indicates the junction of the sacrum and os ilium on each side. He favors the right leg

in walking. The further fact that the pain ran around both sides and shot down into the thighs would lead us to suppose that the original trouble was near the median line—that the affection developed in the center of the posterior aspect of the spine or pelvis.

The swelling, as you see, is located just above Poupart's ligament on the right side, and fills the entire iliac fossa. When the patient flexes the legs and the thighs, I can make deep pressure, and find that the swelling extends to the median line. It is very large and is distinctly fluctuating. We have to deal with a much larger abscess than the outer appearances would indicate. The loin itself is empty. If we had to do with kidney trouble I believe there would be distinct swelling in the right loin. His water, he says, has always been clear, and that which he has passed to-day is normal. So far as it goes that is evidence that there is no kidney trouble. We may regard the question as having resolved itself into two: a question of pelvic abscess due to spinal or pelvic disease, or one due to perityphilitis.

The patient says he has had the pain which he attributes to lumbago for four or five months. It is, therefore, a chronic affair. His general condition has become lowered. If we can find some physical sign of pulmonary trouble, it will go toward confirming the view that he has tubercular disease of the bones of the pelvis, probably of the os sacrum.

The patient says that he had pleurisy two years ago. This is a strong link in the chain of evidence. I am going through the evidence with you methodically to demonstrate how to arrive at a diagnosis. I do not simply diagnosticate pelvic abscess. That is not sufficient. We must be more precise in diagnosis if we would be of some use to the patient. The doctor who would have examined that abscess alone and not the internal

organs also would not have earned his fee. If you want to treat your patient successfully, you must know *all* that you have to treat. If you do not know the original cause of the trouble, your treatment will be mere haphazard, chance work.

As you see, the man's chest is not symmetrical. There is a sinking in on the right side. There is a distinct dulness in the axillary line corresponding to the base of the right lung, both anteriorly and posteriorly. The respiratory sounds at the base of the right lung are diminished. It cannot be pronounced normal vesicular breathing. There is slightly bronchial breathing at the right apex.

I would diagnosticate induration of the right lung, old deposit of pseudo membrane of tuberculous nature around the base of the right lung. And I would diagnosticate a cold pelvic abscess dependent upon trouble in the sacrum or lower portion of the lumbar spine. Still I would make a reservation in the diagnosis, as there is a possibility which cannot be absolutely excluded. If this man had not told us us that he has had lead poisoning and lead colic I should have made this diagnosis without any reservation. But having been told that he had trouble with the gut, I would not exclude absolutely and without any reservation the possibility of perityphlytic abscess, although the chances of its being such are very slight indeed. Perityphilitic abscess sets in with an acute attack which resembles peritonitis. In almost all instances it begins with abdominal distress, very acute pain and a rapid development of a tumor in the groin.

Here is a large pelvic abscess. Is it proper in a case of this kind to drain the abscess? That is the question. If I had the patient in care at a hospital where all the guarantees of a careful and competent management of the wound after the incision had been made, I possibly would do the operation, be-

cause if the abscess were incised and drained the chances would be that the walls would afterward collapse, come in contact again, a sinus would be left which could be kept sweet by proper dressings, and the man would be enabled to go about with comfort. But I confess that I do not like, without urgent indication, to open large abscesses which have their origin in disease of the spine or pelvis. When the Listerian treatment first arose, its author laid great stress on the statement that these cold abscesses, originating in hip-joint disease of the spine or pelvis, etc., could be incised without danger, and that the teaching of old-time surgeons not to meddle with cold abscesses was no longer valid. For a time we all believed with Lister, but we have again come to modify that view. We have come to say that such abscesses should be incised only for some urgent indication; for instance, on account of their great size, impeding locomotion. I have seen such abscesses swell up the thigh six or eight times its normal volume, filling out the gluteal and abductor region so that the patient actually could not walk. In such cases, of course an incision would be proper. In other instances, the abscess may threaten to perforate into the vicinity of the anus, which would be very unfavorable since the faeces would be likely to infect the abscess cavity.

There may be other urgent indications for the incision of a cold abscess. We have seen a case here in which the pain was so acute that the patient sought the counsel of the neurologist who treated him for sciatica. When he was turned over to us we found a cold abscess, which had been working its way out of the pelvis, through the greater sciatic notch. Then we knew that the patient did not need the treatment of the neurologist, but rather of the surgeon. In this case we would evacuate the abscess on account of the great pain it is causing.

Shall we evacuate the abscess in this instance by incision or by another process, which, although not perfect, is a very good substitute for incision? If you incise the abscess, it cannot heal until the disease causing it has healed. The casual lesion, however is not likely to heal very rapidly, therefore it is to be presumed that the fistula will remain patent and the discharge will continue for a very long time; and if you want the fistula to remain in good condition it will be necessary to keep it dressed antiseptically all the time. If you should leave off the dressing or allow the patient to manage the wound himself, you might be sure of septic material extending through the fistula up to the original trouble, whether in the spine or in the pelvis. That should be avoided by all means. Free incision and drainage by a tube would necessitate your constant care of the fistula until it closed. If you cannot make up your mind to the second part of this duty you should not choose the first. If you incise the abscess you thereby put yourself under obligations to the patient to care for the fistula afterward. It will not do to cut open the abscess and let the patient shift for himself, or turn him over to somebody else; for on you rests most of the responsibility for everything that happens subsequently.

Cold abscesses are divided into two classes, those which are becoming larger and in which there is a continuation of the disease from which they originated, and residual abscesses, or those which have remained after the bone disease which caused them has healed.

In the latter class of cases, although the bone disease has healed, there may remain in the abscess cavity some bone detritus to retard the absorption of the pus and union of the walls. No new pus, however, is thrown into the cavity, the old pus corpuscles undergo a peculiar disintegration, the contents of

the cavity becomeropy, and are tinged a reddish color. Furthermore thisropy serum shows a peculiar glitter in reflected light. If you examine some of the contents of the residual abscess under the microscope you will detect numerous little cholesterin crystals as the cause of this glitter. If you empty the cavity you will find that it will not refill, for the cause of the abscess, the disease in which it originated, has been cured. I had such a case in a man who had a swelling occupying the adductor region of the thigh. Having been present nearly twelve years, I was led, as well as several other surgeons, to make the diagnosis of cystic growth. But when I came to operate I could not find the cyst sac; the walls consisted of the muscles and fascia surrounding the swelling. I then cut into the cavity, evacuated a large quantity of material like that just described, inserted my finger and found a sequestrum of bone which was found to have been cast off from the lesser trochanter. The man then remembered that many years before he had had some trouble in the trochanteric region which was accompanied by high fever, and which confined him to the bed. The sequestrum was less than half an inch in its longest diameter, was rounded off on one side and rough on the other, and corresponded to a notch in the lesser trochanter. In a case of that kind, of residual abscess, you need not hesitate to evacuate the contents, for the bone disease having healed, the cavity will not refill, and the walls will close. But if the bone disease remain and you make an incision and drain the abscess cavity, it will go on to discharge pus, infection may take place through mismanagement, the bone disease may extend, the patient become hectic, and, although he may have been doing fairly well before you incised the cold abscess, he may rapidly succumb to the additional inflammation which your incision gave

rise to. Therefore I repeat, do not be too rash in interfering with cold abscesses.

In this case I would advise the patient to go to the hospital, where he will be kept in bed a week or ten days; then we shall disinfect the parts thoroughly, plunge a large sized trocar into the abscess cavity, allow as much of the contents to escape as will, guarding at the same time against the entrance of air into the cavity, and possible infection; then inject a certain quantity of iodoform after Verneuil's method which you have seen me adopt on several occasions. The fluid consists of a solution of five parts of iodoform in one hundred parts of ether, or the emulsion recommended by German authors, consisting of a similar proportion of iodoform and glycerine. The latter can be used in larger quantity than the former, as the injection of a large quantity of ether into an abscess might produce serious ether intoxication.

After the abscess cavity has been injected with this emulsion it will gradually refill again, and possibly a second time, but if the injection be repeated the contents will finally become a clear, limpid fluid, which has no resemblance to pus. The refilling becomes slower and slower, and the patient derives a great deal of comfort from the procedure. I think the healing of the primary cause of the abscess may also thus be hastened, especially if the iodoform could reach the site of the bone disease.

Were the cause of the abscess situated in an accessible region the surgical

treatment would be different. In that event I would slit open the whole abscess and scrape out all the tuberculosis lining with a sharp spoon. Then I would search for the fistula leading down to the bone (supposing that the pelvis was diseased near the crest of the ilium), I would lay it open and remove with the chisel and mallet all the diseased bone, and then close the wound as a freshly made clean wound, and I would expect primary union and healing after the one operation. If you have to deal with tuberculous bone in *accessible* portions of the body, remove the diseased portion of bone at the same time when you open the abscess, and rapid cure will follow. But if the tuberculous affection be *inaccessible*, you should be careful about interfering with the cold abscess to which it gives rise. Those of you who received your surgical training twenty-five years ago, as I did, have found that the old time surgeons knew very well whereof they spoke when they gave the injunction not to meddle with cold abscesses. They could not explain why it was dangerous to incise cold abscesses, but there was common sense and good observation at the bottom of their teaching, and although for a time the rule which they had established was seemingly invalidated, yet we see it again re-established to a great extent. And so it is with many other things which seem for a time to be overthrown by new truth; at last we have to go back and admit that the grain of gold contained in old teachings must not be thrown away with what is evidently but rubbish.—*Med. and Surg. Rep.*

ESSENTIAL PARALYSIS IN CHILDREN.
—Prof. Parvin ordered for a child six years of age, suffering from essential paralysis, the inflammatory stage hav-

ing subsided, faradism to the periphery twice a day, and $\frac{1}{15}$ grain of strychnine three times a day. Keep the skin active by bathing, etc.—*Col. and Clin. Record.*

THE MANAGEMENT OF ECZEMA IN OLD PEOPLE.

Substance of a Lecture

BY ARTHUR VAN HARLINGEN, M. D., PHILADELPHIA, PA.

McCall Anderson has well said that there are few persons who pass through life without having at one time or another suffered from eczema. What the form may be depends very much upon the period at which it occurs. In the infant the acute erythematous, vesicular and pustular varieties are those met with, of which the well-known tooth-rash is a typical example. When we come to adult age we find the vesicular form of eczema in some cases, but rarely the pustular, and we here meet with papular eczema much more frequently. Toward middle age neurotic gouty eczemas, the forms known as eczema rubrum and eczema fissum, with ulcers on the lower limbs and chronic palmar and plantar lesions, are those most apt to be encountered. When we come to old age, by which I mean, generally speaking, the period between sixty years and the end of life, we find eczema assuming a character and invading localities which are sufficiently characteristic to allow of separate consideration.

In the remarks I am about to make upon eczema in old people, I intend to confine myself strictly to my own experience, nor do I think that we can find much to enlighten us on this subject in the text books or the monographs upon this subject as it is touched upon incidentally.

In looking over my private case books I find that I have records of between thirty and forty cases of eczema occurring in persons from sixty to ninety-four years of age. Of these all but two were either eczema erythematous or eczema rubrum, or both combined. These varieties of eczema then may be regarded as essentially characteristic of old age. They are in reality but two stages in the same process, and very often run into one

another. Any portion or all portions of the body may be attacked, although the eruption is commonly confined to some particular part, as the face, the scrotum, or the upper or lower limbs. We not unfrequently encounter eczema erythematous of the face in old people. Here we have a portion or more frequently the whole face, neck, and sometimes chest, covered as if with a mask by a dusky, red, thickened, infiltrated, scaly skin, weeping and cracking in its folds, and giving rise to a pitiable amount of suffering in the form of burning, or itching, or both. Next to the face, in fact among my cases as frequently as the face, are the scrotum and adjacent parts the seat of the disease. Here the disease almost always runs on to eczema rubrum, and we have the scrotum and penis swollen, oedematous, with the skin more or less thickened and infiltrated, dusky red, shining glassy, or varnished, and usually weeping abundantly, with numerous cracks and fissures. The adjacent parts of the thighs are likewise commonly involved, and the disease may run up into the groins and over the abdomen, the appearance here presented being that of erythematous eczema, with a dry, hard, scaly surface, save in the fold of the groin, which is apt to be marked by a deep, red, weeping crack or fissure. The legs are not unfrequent seat of eczema in old people, the disease usually beginning as erythematous eczema, and quickly changing into eczema rubrum, with often a very profuse discharge and not unfrequently ulcers. Varicose veins are commonly, though not always, present.

As regards the etiology of eczema in old people, it must be remembered, in the first place, that eczema is a disease of debility. In most cases of eczema

that are at all severe, debility, a falling off from the natural vigor of the body, is observed. And the debility of old age is of that nature which particularly predisposes to affections of the skin, whether inflammatory or structural. The changes which the skin undergoes in old age, the atrophy of its upper layers and the partial suppression of its normal secretions, modify the character of many diseases, and eczema in particular. This is apt to take on a sluggish and indolent course and often proves utterly rebellious to all treatment.

Malassimilation is another cause of eczema in old persons. This is manifested by dyspeptic and gouty symptoms, obstinate constipation and loaded urine. Among the younger portion of my old patients, those not much past sixty, I find many self-indulgent persons, accustomed to the pleasures of the table and loth to give up such dishes as they have enjoyed in early life, but are not now able to digest. In these cases the eczema is apt to be very stubborn, as it is difficult for the patient to go upon a restricted regimen. Repeated relapses are found to occur from indiscretion in diet.

In a certain number of eczematous old persons you will find cardiac valvular disease. The existence of this disease is, I think, at times an efficient cause in the production of eczema, particularly of the lower extremities, and it certainly affects the prognosis unfavorably.

In eczema of the lower extremities, venous stasis, in the form of and accompanying varicose veins, is a very common cause of eczema in old persons, and this variety of eczema is closely allied to that described above, in the fact that it is apt to be of unfavorable augury. Tilbury Fox first called attention to the circumstances which I have several times found occasion to verify, that eczema of the lower extremities in old

persons is frequently the first sign of a general "break up" of the system.

Regard being had to these factors in the etiology of eczema in the aged, we proceed to the management of our cases by first instituting a careful examination into the patient's constitution, habits and surroundings. Diet, clothing, atmosphere, occupation, mental worry or physical exhaustion, every internal or external cause of impaired health should be examined into, and whatever is faulty should be corrected. I need hardly to say that the condition of the digestive, circulatory and respiratory apparatus should be carefully examined into, the urine in particular being always examined, and I think that few cases will be found where there is not some screw loose, some defective working of the mechanism.

After placing the patient under the best hygienic conditions attainable, the diet should be regulated with regard to the enfeebled digestion of old age, the loss of teeth, the want of exercise, etc. Among the younger of our old patients, errors and indiscretions in diet usually from self-indulgence and the morbid cravings of a depraved digestion, are often encountered. Among the very old what is often needed is advice, not unlike that which we have to give to nurses and young mothers. As the patient approaches the condition of second childhood, the diet of infancy in some respects at least seems that which is most likely to be assimilated. Sometimes we meet with sad cases where the old man or woman is obliged to toil on far past the period when nature demands repose for the worn out frame. In other cases the worry of pecuniary embarrassment or family differences acts like a weight cast on shoulders too weak to bear the load. Unquestionably these unfavorable outward circumstances favor the continuance of eczema in the aged, even if they are not at times its immediate

cause. Removal to a hospital or a home away from the unfavorable influences is often followed by immediate improvement in the eczema.

Indigestion, when it exists, is to be combatted by means appropriate to the individual case. I repeat what I said before, that in the younger of our patients regimen is required, and in addition the medicines appropriate to rectify what is amiss, while in the older patients a diet suitable to the enfeebled digestion of old age, easily or partly digested foods, pepsin, etc., are called for.

Constipation is extremely common in the eczema of old people, especially in eczema of the genitals. To remedy this we must rely more upon drugs than diet. In some cases, particularly the younger ones, purgative mineral waters, especially the Hunyadi Janos, in doses of a wineglassful daily before breakfast, diluted with eight or ten ounces of hot water, may be employed. In older cases the "Lady Webster dinner pill" ("Pil. aloes et mastich") forms the best aperient.

Tonics are at times demanded. Strychnine and quinine are useful. Arsenic should be entirely eschewed. Iron sometimes appears to do much good, especially in the form of the tincture of the chloride or in combination with a mineral acid, as in the well-known *mistura ferri acida*. When diuretics seem to be required, the well-known Basham's mixture may be employed with advantage, to which acetate of potassium may sometimes be added.

Alcohol stimulants are occasionally required in the treatment of eczema in the aged, but must be employed with great caution, and at times certainly do harm. When there is a tendency to heart failure, alcohol must certainly be employed. Digitalis, however, will usually accomplish more in these cases when anything can be done.

The local treatment of eczema in the old is, of course, of great importance. Soothing remedies, as baths of starch and bicarbonate of sodium; lotions, as lead water, black wash, may be employed with advantage. The fluid extract of *grindelia robusta* may be used when the eruption is inflammatory and acute. It should be employed in a diluted form, half an ounce to an ounce being mixed with a pint of water. In applying this wash, cloths soaked with it should be applied to the affected part and allowed to dry in contact with the skin, being then changed for a fresh wet application. On no account should evaporation be hindered, since this would convert the evaporating dressing into a poultice, thus forming maceration and discharge, which is chiefly to be avoided.

In many cases bland astringents or soothing powders may be employed to advantage. Rye flour sometimes succeeds when other applications irritate. The simple dry starch flour, lycopodium, kaolin or subnitrate of bismuth may be mentioned as likely to agree in acute cases. None of these, as a general thing, should be used where there is much discharge. The flour and starch powders in particular are apt to cake and form a crust, under which fermentation with the formation of acid discharge is apt to occur very speedily, adding much to the patient's discomfort, and often aggravating the disease.

The following powder is one which I often use as an anti-pruritic with considerable benefit:

Pulv. camphoræ	1 drachm
Pulv. zinci oxidii	
Pulv. amyli	aa. $\frac{1}{2}$ ounce M.

It should be thickly powdered on, or where practicable, strewn thickly on lint and bound to the parts.

Ointments are most generally useful in eczema of old persons, both soothing ointments and stimulating and anti-pruritic ointments. Among the soothing ointments McCall Anderson's

bismuth ointment stands first. It is composed as follows:

Pulv. bismuthi oxidii	1 drachm
Acidi oleici	1 ounce
Cerae albæ	3 drachms
Vaselini	1 oz.—1 dr.
Olei rosæ	3 minimis M.

Hebra's unguentum diachyli is also useful when well made. Dilute oxide of zinc ointment, ointment of the subnitrate of bismuth, a drachm to the ounce, and of tannic acid in the same strength, prove useful at times.

When somewhat more stimulating ointments are called for, carbolic acid in the strength of ten to thirty grains to the ounce will be found both stimulant and anti-pruritic. Pruritus is at times a most distressing symptom in the eczema of old persons, and tar or carbolic acid will usually be found the most efficient remedy. An ointment of

tar, one drachm to the ounce, may be used alone or in connection with a mercurial, as this:

Picis liquidæ	1 drachm
Ung. Hydrag. nitrat	2 to 4 drs.
Adipis	ad. 1 ounce M.

Sometimes when the eruption tends to palpitation, or when there is much thickening, we may have to use stronger applications, as Wilkinson's ointment:

Olei cadini	
Flor. sulphuris	aa. 3 drachms
Saponis viridis	
Adipis	aa. 6 drachms
Pulv. cretæ	26 grains M.

With one of these local applications, or all in succession if required, you will usually be able to give relief to your elderly eczematous patient and occasionally to cure him. — *Philadelphia Medical Times*.

CASCARA SAGRADA IN RHEUMATISM.

BY H. T. GOODWIN, M. D.,

Assistant Surgeon, United States Marine Hospital Service.

The effect of Cascara Sagrada in rheumatism I discovered by accident. About three months ago I was attacked with severe rheumatic pains in my shoulder, the slightest motion causing intense pain. The third day of the attack I commenced taking as a laxative ten drops of the Cascara, t. i. d. The first morning after taking it the pains were so much less severe that I could move my arm freely. The day following I was entirely free of all discomfort.

Although, as I have intimated, I had not taken the Cascara with any idea of relieving the rheumatism, it occurred to me a few days later that possibly the sudden subsidence of pain might have been due to the drug. There being a few cases of rheumatism in the wards, I determined to try to verify my suspicions. Discontinuing the sal-

icylates, iodides, etc., which these patients were taking, I substituted ext. Cascarae Sagradae fl. 1 c. c., t. i. d. The result astonished me. Within twenty-four hours there was marked improvement in every case. One case is especially worthy of notice. The patient was a Swedish sailor who had been admitted three months previously. He suffered intensely, and although almost everything had been given from which relief might be expected, his suffering was not allayed. For a day or two after admission he improved on large doses of salicylate of sodium, but subsequently the pains returned as badly as ever, and the salicylate had no further beneficial effect. Iodide of potassium was given several different times, but owing to an idiosyncrasy, could be continued only two days at a time, a profuse rash making its appear-

ance over the patient's entire body, the pains remaining as acute as ever. They were not confined to any two or three joints, but felt in all, being more severe however in the wrists, finger joints and ankles, all of which sometimes became oedematous. On the evening of February 5th I commenced the exhibition of fifteen-drop doses of Cascara Sagrada three times daily. The following morning he was about the same; the second day he was much better; on the seventh he was so far recovered that he asked and obtained permission to walk out. From this on he continued to improve steadily, and on the 17th of February was discharged recovered.

I have since used the Cascara in fully thirty cases, some ten of which were in out-patients, and with the exception of three or four in which there was a syphilitic taint, I have obtained the most satisfactory results. I commenced with 1 c. c., t. i. d. and have so far never had to increase it beyond 1 5 c. c., and even to this extent in but two cases. I have seldom had to wait beyond twenty-four hours for beneficial effects. In two cases I had to stop it temporarily owing to its opening the bowels too freely. In such cases I would suggest that one of the preparations of iron be given (separately) at the same time. I usually combine it with syrup or glycerin in equal parts, and instruct the patient to take from thirty to forty drops in water. In one case in which neither it nor the salicylate of sodium appeared to give much benefit I combined the two with good effect. It is but seldom the bowels are opened too freely by it, the cases above referred to being the only ones I have so far observed.

Among the out-patients upon whom I have used it were two intelligent officers of vessels. One was an old river pilot who had periodically suffered

intensely for years. I gave him equal parts of the Cascara and syrup, of which I instructed him to take 2 c. c., t. i. d., and requested him to see me again in three days. He returned a month later, and then only to get the medicine renewed. He reported that he had never before had anything relieve him so quickly. The pains began to abate within twenty-four hours after taking the first dose, and in three days after left him entirely. He had had no return, but for fear of another attack, had come to ask for a bottle to keep with him.

The second case was that of Mr. R, first clerk on a large river steamer. He was suffering so much with pain in the hip joint and thigh that he could scarcely get to the office. I put him on large doses of salicylate of sodium, with colchicum and iodide of potassium, and instructed him to return in a day or two. In a week he sent a friend to say that the pain, instead of lessening, was so severe that he could not get to the office. The salicylate, etc., were stopped and he was given Cascara syrup, thirty-five drops, t. i. d. This was on Friday afternoon. On Sunday he came to the hospital and reported that he had commenced taking the second prescription Saturday morning, and that on Sunday he had felt decidedly better. He was ordered to continue the drops, and report on Wednesday. Tuesday he sent word that he should be unable to report, as he was sufficiently recovered to resume his usual place on the steamer.

I am not able to explain the action of the drug in relieving rheumatism; I leave that to other observers. I write this in the hope of inducing other medical men to use the Cascara, report their experience, and indicate more particularly in what class of cases they have found it of most benefit.—*N. Y. Medical Journal.*

THE PEORIA MEDICAL MONTHLY.

TRANSCRIPT PUB. CO., PUBLISHERS.

THOMAS M. McILVAINE, A. M., M. D., EDITOR.

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- * * All exchanges, books for review, and communications pertaining to the Editorial Department should be addressed to the Editor.
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- * * The publication day of this journal is on or about the 15th of each month.

EDITORIAL.

PROFESSIONAL COURTESY.

A New York weekly called *The Journalist*, pitches into the medical profession in most ferocious style, as follows:

There is not in this world to-day a more powerful, more monstrous, more unjust, and iniquitous organization in existence than that mysterious bond which fetters the medical profession as with links of steel, which is known as "Professional Courtesy." Professional courtesy is an excuse for neglect, for procrastination, for carelessness which is in too many cases tantamount to murder. It is no rash statement to assert that there are hundreds of cases known to physicians who are in other respects reputable men, where patients have died through the criminal neglect and stupidity of the attendant physician. Yet you could not worm an admission of that sort out of them in a court of law—they are bound by "professional courtesy" to allow their ignorant, incapable fellow practitioner to go on murdering without a word of remonstrance.

If you see a ruffianly hack driver deliberately turn his passenger out in the ditch and break his neck or brain him with a whip stock, you are very apt to shout "Police" and try to have the offender put where he can do no more

harm. If you discover a boiler maker sending out defective boilers which are liable to blow up; if a manufacturer is discovered adulterating food products; if a pilot or engineer is found to be incompetent, he is hustled out of the way quickly enough and his fellow professionals are ready to tell the truth about him and have him removed for the credit of the profession. No "professional courtesy" binds them to cover up the errors, incompetence, or stupidity of men in their own line. But with physicians the case is different. In case of criminal malpractice it is almost impossible to get one physician to testify against another, no matter how flagrant the offense. They hang together with a closeness which suggests that they do not know how soon they may need a reciprocation of the favor.

I know of one case where the wife of a newspaper man has been an almost helpless invalid for nearly four years because the physician who attended her at her confinement did not know his business and was careless. It has cost the poor woman four years of the most excruciating suffering, and besides the worry and suffering has cost her husband about thirty-five hundred dollars cold cash. Physicians have told him and told me that the methods of the

incapable scoundrel who first had the case and caused the trouble were all wrong; that he was stupid, old fogyish, negligent. But when asked to make these statements definitely, they sneak in under the cover of "professional courtesy," and refuse to speak. Professional courtesy has not relieved the poor woman of a single ache nor has it replaced a single dollar in my friend's pocket. If the licensed butcher who caused the trouble had been a carpenter, a roofer or a mason, and his defective work had caused that amount of damages, my friend could recover from him in a court of law, but he is a physician and he is protected by "professional courtesy."

If you employ a mechanic to make repairs in your house and you find him to be grossly incompetent, making the house worse than better with his tinkering, you dismiss him and quietly get another. If the other refuses to come you talk about "boycotts" and the iniquity of trades unions and all that sort of thing and very naturally feel much annoyed and indignant. But if you employ a physician to patch up the health of a member of your family, and you find after a reasonable trial that instead of building up he is tearing down, you can dismiss him and get another? Not much. Go and ask another physician to take the case and he will tell you blandly that "professional courtesy" will not allow him to take another doctor's case, without the first doctor giving his permission, and if number one chooses to be ugly you have a boycott beside which the boycotts of the labor organizations are mere child's play. The patient may die, but professional courtesy must not be violated. The only chance you have is to shoot the first doctor, then you can make a change without further trouble.

It is a monstrous wrong, and the surprise is that no paper, has yet lifted its

voice against it. If the journeyman bricklayer, through the machinations of his trades union, puts his employer to expense or trouble, the papers are quick enough to jump on the poor fellow and condemn his organization, but if the physician, through the unwritten rules of his trades union, causes his employer untold suffering, endless expense and perhaps death, no one has the courage to condemn him because he is a physician and his trades union is Professional Courtesy.

It is a hopeful sign when articles like the foregoing one are written; it shows to some extent the power of the medical profession, though we deny *in toto* and absolutely that their power is ever exerted as the *Journalist* would make out. Physicians are not brutes, and when a case arises in which their opinion is called for, they always give the patient the benefit of honesty and truth, let it hurt whom it will.

But, should physicians volunteer advice or opinions when it is not asked for? Had an outside physician told the husband of the lady mentioned above that her chosen physician was "stupid, old fogyish and negligent," would he not have been promptly told that they knew what they were about, and that it was only jealousy that prompted his interference?

When physicians seek to warn the community against quacks and imposters, how much assistance do they get from the majority of newspapers? They are accused of "Professional Jealousy," and are abused and vilified without mercy or reason. We know of many cases where physicians have thus attempted to protect the people against imposture, and we know their

experience has been such as to deter others from attempting the same philanthropic course.

Even State Boards of Health, whose sworn duty it is to protect the people against incompetent practitioners, are roundly abused when some "good advertiser" is fined for attempting to practice contrary to the laws of the State.

Newspapers, too, are apt to take up with every new fad that comes along, especially if it be connected with some subject on which the editors happen to be profoundly ignorant. The Mind Cure, or Christian Science, is an example in point. Had physicians warned devotees to this new craze that they were playing with fire, their advice would have been put down to professional jealousy, but had that advice been followed it would have saved life in Peoria, in Chicago, in Malden, Mass., in California, and, in fact, in every town in which it has long been practiced. In Chicago a jury recommended "that all cases treated by Christian Scientists, so called, be investigated."

This craze was spread by means of the newspapers, and at first nothing was too good to be said about it, but now public opinion is changing, and the papers will soon pitch into faith

cure and faith curists, and the end of the craze is not far off.

This is one reason why physicians do not go around from house to house warning the "dear people against stupidity, old fofoism and ignorance," as the *Journalist* would seem to want them to do.

The following fable, taken from the same issue of the *Journalist*, comes pretty near answering the above attack upon the medical profession, and we commend it to the editor's mature consideration:

One day to the lion, crept Reynard, the fox,
Saying, sir, I must tell you the truth, tho' it
shocks,
For I deem it my duty no longer to hide,
What, when you shall hear, you will scarcely
abide.

Know your majesty then, that an insolent ass
Has dared, on your courage, a libel to pass.
He says that my fear at your terrible sight
Were known your real worth, would be rather
more light,
While your bravery praised to the echo, by all
In the presence of truth would have aught of a
fall.

For if this be not so ne is much of a mind
That your prowess to prove you are little in-
clined,
And, all put together, his donkeyship says
That in you, up to date, he's found little to
praise.

* * * * *

Meditated the lion for a moment or so,
Then replied to the fox—"My young friend
you may go
Tell your long-eared companion to kick as he
will,
That I am the lion and he the ass still."

*Adapted from the Portuguese of C. Souza by
F. C. H.*

EDITORIAL NOTES.

WHEREAS The labors of the chemist, the manufacturer and the publisher are inseparably connected with the work of the physician and surgeon in the advancement of medical science, and their reciprocal relations having

always been cordially recognized by the medical profession, therefore

We, the proprietors and representatives of 104 leading manufacturers of medical preparations, surgical instruments and publishers of medical litera-

ture, in convention assembled during the thirty-ninth annual meeting of the American Medical Association, respectfully submit the following sentiments:

That, we learn with gratification of the unanimous rejection by the association of a resolution tending to destroy the exhibition feature at its annual meetings, and that the resolution was prompted more in interest of commercial competition than by the requirements of the profession, and that the recognition of this by the members of the association in their desire for continuance of exhibits, is cause for congratulation, and will serve to perpetuate the harmonious relations between manufacturer and practitioner that have through a long series of years remained unbroken.

That prompt and cordial recognition of the value of the manufacturer and publisher to the medical practitioner, will elevate in higher degree the medical profession in the esteem and confidence of the people.

That, we will in the future as in the past encourage such exhibits only as are in good faith to meet the uses and approbation of the scholarly progressive and conservative practitioner.

J. W. FAHR, M. D., Chairman.
ALFRED CLARK, Secretary.
JOHN BALLARD,
P. KING, M. D.,
J. W. LAMBERT.

THE *American Meteorological Journal*, desiring to direct the attention of students to tornadoes, in hopes that valuable results may be obtained, offers the following prizes:

For the best original essay on torna-

does or description of a tornado, \$200 will be given.

For the second best, \$50.

And among those worthy of special mention \$50 will be divided.

The essays must be sent to either of the editors, Professor Harrington, Astronomical Observatory, Ann Arbor, Michigan, or A. Lawrence Rotch, Blue Hill Meteorological Observatory, Readville, Mass., U. S. A., before the first day of July, 1889. They must be signed by a *nom de plume*, and be accompanied by a sealed envelope addressed with same *nom de plume* and enclosing the real name and address of the author. Three independent and capable judges will be selected to award the prizes; and the papers receiving them will be the property of the Journal offering the prizes. A circular giving fuller details can be obtained by application to Professor Harrington.

AT the last meeting of the Ophthalmological and Otological section of the New York Academy of Medicine, the following motion was made and carried:

"That a committee be appointed, of which the chairman of the section, Dr. David Webster, be a member, whose duty it shall be to obtain a good photograph of the late Dr. Cornelius R. Agnew, for the purpose of having engravings suitable for framing made from this. The right of issue and sale of such engravings shall be given to some first-class publisher, if practicable; if not, the committee shall offer them to the profession at cost."

In accordance with the above, a committee has been appointed. Mem-

bers of the profession who desire such an engraving accompanied by an autograph signature, should send their names and addresses to the secretary of the committee, Dr. Charles H. May, 640 Madison Avenue, New York City, at once. When all such names shall have been recorded, those who have requested a copy of the engraving will be notified of the cost of the same, either by the publisier, or by the committee having the matter in charge.

DR. N. S DAVIS' views on advertising and physicians certificates to proprietary articles must have undergone a radical change shortly before the Cincinnati meeting of the A. M. A. In the daily issue of the *Lancet and Clinic* was a very flattering letter from Dr. Davis endorsing somebody's brand of soap. We would rather recommend somebody's pharmaceutical preparations than so unstable an article as soap. Wonder what has come over the Doctor?

A MEETING preliminary to the formation of the National Association of Railway Surgeons has been called for Chicago June 28. We do not exactly see the necessity for such an organization, but will have to attend to find out.

SIR MORRELL MACKENZIE, at last acknowledges that the disease of the late Emperor of Germany was cancer. He intimates that he had known this for six months, but concealed it for state reasons.

THE Indiana State Medical Society had an attendance of over 400 out of its 1,400 members, a few weeks ago at Indianapolis. Good for Indiana; would that we could say as much for Illinois.

THE American Rhinological Association will hold its sixth annual meeting at Cincinnati, Ohio, September 12, 13 and 14, 1888. Dr. John North, Secretary, Keokuk Iowa.

BOOK NOTICES.

Owing to various reasons extended reviews of the following books are postponed until future issues. Many of these works are of such recognized value that scarcely more than the announcement of their publication is necessary:

ATLAS OF VENEREAL AND SKIN DISEASES, comprising Original Illustrations and Selections from the Plates of Profs. Kaposi, Hutchison, Newman, Tournier, Keyes, Otis, Morrow, Hyde, Piffard, and many others. With original Text. By PRINCE A. MORROW, A.M., M.D., Clinical Professor of

Venereal Diseases University of the City of New York. Folio. Printed in fifteen monthly parts, each containing five folio chromo-lithographic plates, and from fifteen to twenty folio pages of a Practical Treatise Upon Venereal and Skin Diseases. Price, per part, \$2.00. Wm. Wood Co., New York. Sold by Subscription only.

PATHOLOGY AND TREATMENT OF THE INFECTIOUS DISEASES. Part First. The Miasmatic and Miasmatic Contagious Diseases; Intermittent Fever, Typhoid Fever. Part Second. Measles, Scarlet Fever, Small Pox, Vaccinia Varicella, Rubella, Diphtheria. By

KARL LIEBERMEISTER, Professor of Internal Pathology and Therapeutics, Tuebingen, Germany. Two vols., 12 mo., paper, pp. 141-128. Nos. 8 and 9, of the Physician's Leisure Library for 1887. George S. Davis, Detroit, Mich. Price, 25 cents. Subscription price, 12 vols., \$2.50 a year.

THE APPLIED ANATOMY OF THE NERVOUS SYSTEM. Being a Study of this Portion of the Human Body from a standpoint of its general interest and practical utility in diagnosis, designed for use as a Text Book and a Work of Reference. By AMBROSE L. RANNEY, A.M., M.D., Professor of the Anatomy and Physiology of the Nervous System in the New York Post-graduate Medical School and Hospital, etc., etc. Second edition, rewritten, enlarged and profusely illustrated. 8 vo., cloth, pp. 791. D. Appleton & Company, New York, 1888.

THE PATHOLOGY, DIAGNOSIS AND TREATMENT OF THE DISEASES OF WOMEN. By GRAILY HEWITT, M.D., F.R.C.P., Professor of Midwifery College, London, etc., etc. A new American from the fourth revised and enlarged London edition, with 236 illustrations. Edited with notes and additions. By H. MARION-SIMS, M.D., New York. Vol. I, 12 mo., cloth, pp. 350, complete in 3 vols. E. B. Treat, 771 Broadway, New York, 1887. Price, \$2.75 each.

A MANUAL OF THE MINOR GYNECOLOGICAL OPERATIONS. By J. HAL-LIDAY CROOM, M.D., F.R.C., P.E., F.R.C., S.E., Lecturer on Midwifery and Diseases of Women at the School of Medicine, etc., etc. First American from the Second Edinburgh Edition. Revised and Enlarged by LEWIS S. McMURTRY, A.M., M.D., with numerous illustrations, 12 mo., cloth, pp. 228. Records, McMullin & Co., Philadelphia, Pa., 1888.

THE SURGICAL DISEASES OF THE GENITO-URINARY ORGANS, INCLUDING SYPHILIS. By E. L. KEYES, A.M., M.D., Professor of Genito-Urinary Surgery, Syphology and Dermatology, in Bellevue Hospital Medical College, etc., etc. A revision of the Buren and Keyes' Text Book upon the same subject. Illustrated, 8 vo., cloth, pp. 704. D. Appleton & Co., New York, 1888.

THE LANGUAGE OF MEDICINES. A Manual giving the Origin, Etymology, Pronunciation and Meaning of the Technical Terms found in Medical Literature. By F. R. CAMPBELL, A.M., M.D., Professor of Materia Medica and Therapeutics Medical Department of Niagara University, 8 mo., cloth, pp. 318. D. Appleton & Company, New York, 1888.

LECTURES ON DISEASES OF THE HEART, delivered at the College of Physicians and Surgeons, New York. By ALONZO CLARK, M.D., L.L.D., Emeritus Professor of the Principles and Practice of Medicine, etc. 12 mo., cloth, pp. 250. E. B. Treat, 771 Broadway, New York, 1887. Price \$2.75.

A MANUAL OF MEDICAL JURISPRUDENCE, with Special Reference to Diseases and Injuries of the Nervous System. By ALLAN McLANE HAMILTON, M.D., one of the Consulting Physicians to the Insane Asylums of New York City, etc., etc. 12 mo., cloth, illustrated, pp. 390. E. B. Treat, 771 Broadway, New York. Price, \$2.75.

A REFERENCE HAND BOOK OF THE SCIENCES, embracing the entire range of Scientific and Practical Medicines, and allied Sciences, by various writers. Illustrated by chromolithographs and fine wood engravings. Edited BY ALBERT H. BUCK, M.D., vol. vi., 4to, cloth, pages 778 (Pra. to Feb.), Wm. Wood & Co., New York, 1888.

CONTRIBUTIONS TO THE STUDY OF THE HEART AND LUNGS. By JAMES R. LEAMING, M.D., Emeritus Professor of Diseases of the Chest and Physical Diagnosis in the New York Polyclinic, etc., etc. 12 mo., cloth, pp. 300. E. B. Treat, 771 Broadway, New York. Price, \$2.75.

LESIONS OF THE VAGINA AND PELVIC FLOOR, with special reference to Uterine and Vaginal Prolapse. By B. E. HADRA, M.D., Austin, Texas, with 83 Illustrations, 12 mo., cloth, pp. 320. Records McMullin & Co., Philadelphia, Pa., 1888.

PERISCOPE.

A VERY VALUABLE LESSON FOR THOSE WHO USE ANAESTHETICS.—In a paper read before Baltimore Academy of Medicine by Julian J. Chisholm, M.D., the following case is given:

R. A., a robust, healthy child, three years of age, was recently brought to me with a cancerous left eye. The attention was first called to the yellow appearance of the pupil eighteen months before. The gliomatous mass filled the vitreous cavity, distending the pupil and obliterating the anterior chamber. The eye was injected and painful. The prompt removal of the eyeball was urged as the only means of protecting the child from a painful death. The operation was accepted by the parents, and the enucleation, under chloroform, accomplished under much difficulty, as the sequel will show.

The child was suffering from a bronchial trouble, but that was not deemed an obstacle to the administration of an anaesthetic. The patient was placed on the operating table, his clothing loosened about the neck and chest, and chloroform was inhaled from a towel, folded in conical form, with open top. Deep sleep was soon induced.

When the anaesthesia was complete, the operation for the removal of the diseased eye was commenced. The conjunctiva was divided around the cornea, and the tendon of the external rectus muscle was being sought for, when respiration suddenly ceased. The face assumed a death-like pallor, the pulse disappearing at the same time

from the wrist. Immediately the child was suspended by the feet, with body and feet hanging down at an inclination of seventy degrees, while an assistant volunteered chest-compression for artificial respiration. After a few minutes signs of a feeble respiratory movement were noticed, a slight throbbing of the neck vessels was detected, and in time the child evinced its return to consciousness by crying.

He was laid on the table, but would not permit the eye to be touched without a twist of the head, evincing great irritability or sensitiveness of the conjunctiva. As the operation had to be completed, I ordered chloroform to be administered. Chloroform narcosis was very soon re-established, but before I had time to resume the operation the child again stopped breathing and the pulse disappeared. The body, apparently of a dead child, was once more hung up by the feet, so as to allow blood to gravitate toward the anaemic head and brain, but with no further attempts at artificial respiration. Myself and four assistants watched anxiously the pale face, to catch the first evidence of returning vitality. After some minutes I noticed that the large vessels at the root of the neck showed some fulness, then a slight thrill, and after this the first attempt at a thoracic movement appeared. In ten minutes breathing was sufficiently strong to allow the child to cry again, much to the relief of all of us.

Still the operation which was so im-

peratively called for, for the future safety of the child—even the saving of its life from the ravages of cancer—was uncompleted. While the father and mother, both present in the operating room, were pleading for their child, they were made aware, by the restlessness of the patient when the eye was touched, that nothing could be done without the child going again to sleep, so I once more ordered the inhalation of chloroform. For the third time chloroform narcosis was promptly established, and was followed very soon afterward by suspended respiration and the disappearance of the pulse. Death now seemed to be complete. Immediately the child was hung up by the feet. The absolute quiet of the operating room was broken only by the lamentations of the parents. All eyes watched the face of the child. Five minutes seemed an hour, and the ashy lips showed, so far, no response. Soon after this a faint effort at respiration was observed, which became stronger with each return of the thoracic movements, and the pulse was again felt feebly at the wrist. When respiration seemed established, complete insensibility continuing, I had the child laid upon the operating table. As soon as the body assumed the horizontal position, the pulse, not yet strong, disappeared from the wrist, and the respiration ceased, necessitating at once a renewal of the suspension. This curious phenomenon of breathing when suspended, and becoming inanimate when the prone position was too early assumed, was repeated two or three times respectively. For safety, for I was afraid to lay child down, I was forced to enucleate the eye while the child was suspended with head downward—an awkward position for operating. It was sometime, fully a quarter of an hour, after the operation was completed and the eye bandaged, before I could trust the child in the recumbent posture.

One of my assistants was very anxious to have whisky injected, and had filled his hypodermic syringe for that purpose, but I declined its use, trusting to inversion alone for resuscitation. The final successful issue of this case confirmed my faith in this invaluable method, which I had used successfully on former occasions, and hence confided in it for the protection of the patient through the trying ordeal. In all, the child must have been suspended in the inverted position for fully three-quarters of an hour. After the last suspension no further trouble ensued. The next day the child was so thoroughly himself that he left the hospital with his parents. He was brought back to the dispensary, for inspection, two days afterward, a picture of health.

This case cannot be too carefully studied by surgeons who must continue to use general anaesthetics. It is one of a series occurring to me now and then—I am glad to say at long intervals—as the consequence of chloroform inhalation.

I am a strong advocate of chloroform, believing it to be the most available remedy of its class. I recognize it as a powerful agent for evil, but at the same time I believe it to be the best of the general anaesthetics. In army life and civil practice I have had a personal experience of at least ten thousand administrations, and without a death. For thirty years I have had charge of a surgical hospital service, and my daily use of chloroform has been the subject of professional observation. Sulphuric ether I have seldom used—not one hundred times in my life, and in most of these instances only to exhibit on patients the effects of the various anaesthetics to medical classes at the University of Maryland Hospital Clinic. In the last ten years I have not used it once. For painful operations of very short duration I use the bromide of ethyl, and for all others I use chloroform exclusively.—*Med. Herld*

IS THIS BUSINESS?—American medical, pharmaceutical and trade journals, usually keen to detect a hidden advertisement in communications recommending new drugs and preparations when the same emanate from home sources, throw caution and ordinary business sense to the winds when it comes to recommending and puffing the very same class of merchandise bearing a foreign name and recommended by foreign authority. The success of one or two German chemicals, the products of synthesis, opened the doors for a flood of antiseptins, antifebrins, antipyrrins, and other "antis" ending in "ol" or "in." They come to us covered all over with patents—patents covering the names, the process of manufacture, the ingredients (save those which are kept absolutely secret), the modes of dispensing, the package, the label—in short everything that a patent can be made to cover. In a word, they are patent medicines in the very widest and strictest sense of the term; and yet they are received with enthusiastic welcome by press and practitioner, and are given gratis and gladly, advertisements that money could not purchase for a home product, even though ten times more valuable and not one-tenth so much patented.

One of the proprietors of a drug of this sort recently established in America on being approached by the solicitor of advertising for an American medical journal, answered very curtly that "they didn't have to advertise their article. They got all the advertising they wanted for nothing, in the shape of laudatory communications in the reading matter of the American journals," which was true, every word of it, and that in spite of the fact that it was a patent medicine. The very journal for which the agent was soliciting, and in the very copy which he carried as a specimen, contained no less than six laudatory notices of the drug in question—one of them a communi-

cation covering several pages, and heralding its virtues in almost every known form of disease.

Per contra, the same journal had enjoyed for years a handsome revenue from the advertisement of a reputable proprietary medicine house of this city, but had persistently refused to admit within its reading matter a little notice commendatory of one of its specialties, the formula of which was printed on every bottle.

It is useless to plead that these imported patents are so valuable that the profession *must* have them and *must* use them, secret nostrums though they be. This is not true, nor is it true that the manufacturers over there are any more frank or honest as to the nature and origin of their wares than are the American manufacturers of similar drugs. In proof of this assertion we call the attention of our readers to Gawalowski's merciless exposure of a new compound which is getting ready in Germany to make a descent on Europe and America in the style of its predecessors—the antiseptic kreolin, of the wondrous value of which the advance guard of certificates have already commenced to appear in our journals. Will the latter be warned in time, or will they swindle themselves out of thousands of dollars by giving it the usual American welcome and gratis advertising?—*F. L. James, Editor National Druggist, May 1.*

FOR VOMITING OF CHOLERA INFANTUM:

R. Bismuth subnit	10 grains
Mucil. acaciæ	½ drachm
Acid carbolici	½ grain
Tinct. opii deodorat	1 drop
Mist. cretæ	½ drachm

M. S.—To be given every two hours, for a child one to two years old.—*Hughes.*

THE New York College of Physicians and Surgeons graduated one hundred and twenty out of a class of eight hundred.

THE PEORIA MEDICAL MONTHLY.

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ORIGINAL COMMUNICATIONS.

SEVENTEEN CASES FROM PRIVATE PRACTICE OF CALCULI IN THE BLADDER OR URETHRA OF CHILDREN, FIFTEEN OF WHICH WOULD SEEM TO LEND SUPPORT TO THE THEORY OF EXCESSIVE MEAT DIET AS A POSSIBLE CAUSE OF ORIGIN.

BY ALBERT B. STRONG, A. M., M. D., CHICAGO, ILL.,

Surgeon to Cook County Hospital.

Stone is so often present in the urinary tract of mankind and the lower animals that no geographical region of the civilized world is exempt from it. Calculi have been found in the kidney of the three months foetus and in the bladder of the four score and ten adult. We do not consider it strange, therefore, that the cause of this condition has been eagerly sought for by zealous workers in all ages and centuries. Theories are as numerous as the writers or locations from which the observations were made.

Among other causes, we find given in the literature as the most important conditions of life as to wealth or poverty, heredity, gout, rheumatism, water and food, sour wines, fermented liquors, indigestion, climate and west winds. I am creditably informed that in those regions of Germany where the sour Rhine wine is consumed, the drinkers mix the beverage with an alkali to guard against kidney colic. My friend Dr. Powell tells of an acquaintance, a physician, who invariably after drinking a glass of sour wine suffers from

renal colic within the next twenty-four hours. One or two days afterward he always passes from the urethra a uric acid calculus as large as a grain of wheat.

It is perfectly safe to state, that we of the present enlightened age, are no more uniform in our ideas of causation than were our forefathers.

It is not at all unreasonable to suppose that at some future time the cause or causes may be discovered to be from within rather than from without. In short, that the condition is due to an error in nutrition.

While opinions thus differ as to causation, the authorities unanimously agree that in about 95 per cent. of all urinary calculi the nucleus is uric acid.

Stone in the bladder is more frequent in infancy and childhood than at any period of life. Physiology informs us that infantile urine is always concentrated, particularly so in intra-uterine life. It also tells us that in normal urine uric acid is present, in all cases, in the relative proportion of ten grains daily. It is not free but in combination

with alkaline bases, which freely hold it in solution. Any excess of acid combines with the alkaline bases and liberates uric acid.

Virchow states "that uric acid infarctions is a phenomenon nearly constant in the kidneys of young infants." I am unable, after a somewhat extended research, to give statistics as to the exact origin of the nucleus as to frequency either in the kidney or bladder. It is highly probable, however, that in a very large proportion of cases the calcule begin in the tubules of the kidney.

If crystallization takes place in the bladder the product is very apt to be voided as gravel. If, on the other hand, crystallization takes place in the kidney tubules, it is, from its very origin, a stone, confined in a narrow space, rapidly growing by accretions of uric acid crystals and other products excited by its local irritation, until finally it passes from the kidney to the bladder, giving rise to nephritic colic, where if not speedily expelled it grows by accretion.

It has been my good fortune during the past fifteen years to have seen a number of cases of calculi in children, ranging in age from twelve months to eight years. Most of these cases have occurred in the practice of Dr. Chas. Venn.

Of the cases alluded to—seventeen in number—three were operated upon by the left lateral perineal section, and the stone removed. In ten cases the stone was passed spontaneously or assisted through the urethra. In four the parents refused to allow the operation and the patients died from uræmia,

consequent upon an over-distended bladder.

Of these seventeen cases, two were children of German parents and fifteen of Polish origin. This large proportion of stone cases occurring among children of one nationality in the doctor's extensive practice among children of all nationalities became a matter of great interest to us, and we accordingly set about if possible to discover the cause. The large Polish population of the northwestern portion of this city furnished the cases. In our investigations many other cases of calculi in the bladder or urethra were heard of, though not personally seen. These seventeen cases I can, however, vouch for as being authentic.

These people are prolific, and it is not uncommon to see a family of eight or ten children. As a rule, the parents are very poor, and consequently their sanitary surroundings as to cleanliness, personal and otherwise, light, ventilation, crowding, food and clothing, are most uncomfortable.

There is a custom almost universal among this people that would seem at least to be one factor in the causation of the disease, viz: The meat diet given to the children. As a rule the mother nurses the baby until it is ten or twelve months of age, when there is generally another one on the road, and the little one is compelled to shift for itself. He begins his independent existence by living largely upon sausage put up in small gut cases.

This article is cheap, easily prepared and very nutritious, and the little one sucks and munches his full several

hours a day. Carpenter states: "On a full meat diet the normal daily excretion of ten grains of uric acid is increased to thirty-two and five-tenths grains." Uric acid forms the nucleus of fully ninety-five per cent. of all urinary calculi. Therefore in these cases reported it would seem reasonable to infer that meat diet was at least one of the most powerful elements of causation. I regret, however, to state that the stones were not examined for the nucleus.

These are the stones removed. The smallest weighed two grains, and was from a child twenty-two months of age, which was operated upon March 17, 1884. The next weighed eight grains, and was removed by operation from a child twenty-seven months old March 24, 1888. Both of these children recovered promptly, and have since remained in perfect health.

The third and largest weighed three and one-half drachms, and was removed from a boy eight years of age, who was operated upon August 8, 1878. The history of this case is interesting, particularly in two points: 1st, The undoubted kidney origin of the stone; and, 2nd, The years of dribbling of urine which followed the operation. The following notes were made at the time of the operation:

Present—Doctors Powel, Graham, Garatt and Moore; August 8, 1878.

R. M.—A large sized, well developed boy, eight years old; 103 Tell St.; German.

The mother, an intelligent woman, gives the following history: Child was perfectly well up to three years of age,

when he had a mild attack of measles. On the third day of the eruption the boy sprang out of bed complaining of great pain in the lower part of the abdomen. He screamed and ran about the room after leaping "a foot high," and continually crying out "Oh, my belly!" This severe attack lasted an hour, and milder attacks were of frequent occurrence for the next few days, during which time he frequently pulled at his penis. His urine came in drops, and he appeared to suffer much pain in voiding it. On the fourth day the pain and habit of pulling at the penis suddenly disappeared and he remained in perfect health for the subsequent six months, when he was seized with a second attack similar to the first, which also lasted three or four days. Again the trouble disappeared as suddenly as it had appeared. He was then perfectly well for four months, when a third attack seized him. During the last three years these attacks have been of frequent occurrence, while the habit of pulling at the penis continued more or less constantly. For half an hour after urinating the child would scream with pain.

Ten days ago he was seized with excruciating pain which has been paroxysmal ever since. During the paroxysm the child was perfectly uncontrollable, throwing his body about in violent contortions. This condition terminated in a spasm on the tenth day. During the ten days the patient complained of pain shooting from the right lumbar region downwards towards the bladder. "Something keeps sticking me," he said. He also suffered great pain at the head of the penis.

I removed this large, double convex, smooth stone, and a smaller one weighing fifteen grains. Query? Could not this smaller stone, though very large for the ureter of a child, have passed from the kidney to the bladder during the last attack of pain, which was apparently the severest he had ever had? The wound was completely healed in three weeks.

There are a few points which admit of special mention in this case. From the repeated attacks of renal colic there could be but little doubt that the stone originated in the kidney. There was no history of excessive meat diet. There was, however, a history of an acute febrile attack with its accompanying highly concentrated urine.

Again, I have seen the patient within the last day or two, and learned that for the first five years succeeding the operation there was constant dribbling of the urine in the daytime.

Yet for the next three years, only when the boy caught cold was the condition present. Since then he has been perfectly well in this respect. He is now a large, well developed boy, following the laborious work of a moulder. From the first he was able to retain the urine at night.

This dribbling of urine after perineal lithotomy is not alone confined to this case. I learn from other operators that it is not at all uncommon. The text books consulted are, however, lamentably silent on this point. In giving a prognosis in these cases this possible condition should not be lost sight of. Only a word concerning perineal section in children. The steps of the operation are the same as those in the

adult. There are, however, a few peculiarities depending upon the different anatomical nature and relations of the infantile bladder. You will remember that such a bladder, aside from its smallness, is differently situated in the pelvis. It is much higher, so that the distance from the skin to the base of the organ is relatively greater than in the adult. As a result of this anatomical peculiarity, in opening the bladder the handle of the knife must be more depressed than in the adult; otherwise, the danger of cutting into the space between this viscus and the rectum.

Again, the bulb of the urethra and the prostate gland are so rudimentary that neither practically exist, hence there is little danger of wounding the bulb or its artery. Again, the rectovesical fold of the peritoneum is much higher than in the adult, and consequently there is but little danger of opening the peritoneal cavity should the incision be extended back unduly far.

The objective point of opening the urinary tract is the membranous portion of the urethra. In my opinion, this should be incised in case of suspected small stones in an infant, only large enough to admit a small, straight pair of forceps. I doubt the necessity or wisdom of making an opening large enough to admit the index finger. To accomplish this the incision into the bladder must be very large; otherwise there is actually danger of tearing the urethra and crowding the bladder upwards in attempting to pass the finger in—an accident which has occurred more than once.

I would not introduce the finger into

the bladder at all. The small forceps and free irrigation are sufficient to cleanse the bladder thoroughly.

I cannot in too forcible language condemn the advice, in the recent edition of the *Encyclopædia of Surgery*, to cut freely through the prostate and bladder.

Only a word more concerning the

ingenious manner in which Dr. Venn extracts urethral calculi when they are lodged in the canal anterior to the perineum. He distends the canal in front of the obstruction with oil, when the stone is easily manipulated forward, and if necessary, removed with the forceps, assisted if need be by a slight nick in the meatus.

THE EXTERNAL APPLICATION OF SULPHUR IN SCIATIC NEURALGIA.

BY J. D. COWDEN, M. D., ROCK ISLAND, ILL.

Read before the Illinois State Medical Society, at its 38th Annual Meeting, in Rock Island, Ill. May 15, 1888.

Sulphurous baths, natural and artificial, have been in vogue for a long time in the treatment of rheumatism and neuralgia. The external application of the flowers of sulphur, however, in the treatment of sciatica, although its therapy, on second thought, from our previous knowledge of the action of sulphur, would seem rational enough, has but recently been tried.

In the *Therapeutic Gazette*, for April, 1888, will be found an article on "The External Application of Sulphur in Sciatic Neuralgia." In confirmation of what is therein stated, I beg leave to report to this Society the following case, which recently came under my observation:

J. R., age 45, weighing 187 pounds, an Irishman of sanguine temperament and strong constitution, in robust health up to the time of this attack; saloon-keeper by occupation, "very happy" in his calling and "cheerfully waited upon his customers." For two months before I was called to see him, he had been an almost constant sufferer from

sciatic neuralgia. He finally became unable to walk about, took to his bed, and to use his own language at the time I first saw him: "I am suffering the tortures of the damned, and am not able to sit, stand nor lie." He had a haggard, worn look, and his condition was indeed pitiable in the extreme. For some four weeks the usual remedies for neuralgia were tried with indifferent results, until finally, in addition to the usual treatment it took morph. sulph. gr. ss.; atropia sulph. gr. $\frac{1}{4}$, hypodermically, twice or three times in the twenty-four hours to give him even temporary relief from his horrible suffering. At the end of this time I called one morning and found him in agony, writhing in torture and completely discouraged. He begged most piteously for the hypodermic injection and said he would die. I told him I would give him no more hypodermics and no more medicine, but would bury him in sulphur instead. He then said: "My God! doctor, I will die before night if I don't get relief."

I told him that if the sulphur did not relieve him he would have to die, as that would be the only treatment for the next twenty-four hours.

The limb was accordingly enveloped in the dry sulphur. In less than two hours he was sweating profusely, sleeping soundly and oblivious to all pain and suffering. He woke up in the evening long enough to take some nourishment, and then fell asleep and slept continuously during the following night, the perspiration continuing, and awoke in the morning free from pain, able to turn over in bed and move and extend the limb in all directions without complaint. The look of suffering that had been so marked before the application of the sulphur, was gone. He then got up and, to his great surprise, walked easily about the room without suffering or pain. He was then put into a large wash tub, thoroughly scrubbed and washed with soap and water, after which, at his own request, he was again put to bed and the sulphur reapplied to the limb and sacral region of the spine. The next morning he was given another bath, the neuralgia had disappeared, and from that time on, without further medication, his recovery was continuous and, so far as the pain is concerned, up to this writing is complete.

For a few days after discontinuing the sulphur he suffered from sleeplessness and nervous prostration, but the further progress of the case towards recovery was left to the *vis medicatrix naturæ*.

The perspiration, the breath and urine, after the application of the sul-

phur, were very soon impregnated with sulphuretted hydrogen, making it very disagreeable for the patient and his attendants on that account. The rapid absorption of sulphur, as shown by the profuse perspiration, perfumed breath, etc., and the speedy relief which followed its application, would seem to point to a specific action of the remedy.

On April 30, some two weeks after the above report was written, the patient had a relapse, caused by sleeping in a draft between two open windows, and the sulphur had to be reapplied. The same happy effect, entire relief from pain, followed as quickly and promptly as it did on the first application of the remedy.

On May 10, in consequence of his anaemic condition, caused by his long sickness, I put him of 20-drop doses of the tincture of iron four times a day, since which time he has rapidly gained in health and is now entirely free from his neuralgia.

"There is a pleasure in the pathless woods" of speculative medical philosophy, "a rapture on the lonely shores" of the imagination of the disconcerted doctor, known only to certain medical minds so formed as to be ever open to the reception of theoretical ideas and impressions for the relief of suffering humanity. It may yet prove to be a most happy conception, freighted with relief for suffering mortals, which suggested to the imagination of the enthusiastic, speculative medical philosopher the idea of applying sulphur externally in sciatic neuralgia, so quickly and speedily does entire relief from horrible suffering follow its application.

SELECTED ARTICLES.

DYSENTERY, (SO-CALLED.) ENTERO-COLITIS.

BY J. S. TODD, M. D., ATLANTA, GA.

Errors in diagnosis between dysentery and enteritis are very liable to occur, especially during epidemics of the former. I am persuaded that such a mistake is often made. I confess to having been so unfortunate myself on several occasions. Indeed, while the text books make the difference so plain that it would seem that a blunder was impossible, nevertheless mistakes occur. Even diarrhoea is often mistaken for dysentery, and *vice versa*. Says Da Costa, after differentiating between them as only he can, "yet in practice we meet with cases which commence with diarrhoea and end in dysentery, or begin with dysenteric symptoms and terminate in diarrhoea, and in which it becomes, therefore puzzling to say whether we are dealing with the former or latter disorder." Says the same author, "colitis is not always dysentery, and dysentery is often more than mere colitis."

During the summer just passed, and also to a limited extend this spring, a fatal form of dysentery, so-called, was prevalent over all northern and middle Georgia. I am sure many lives were lost by the too prevalent practice of treating disease by name—but more of this *anon*.

The leading symptoms in the great majority, if not all the cases, for the first day or two are clearly dysenteric, the lesions being referable to the rectum and colon. There is at this time, *i. e.*, after 36 to 48 hours, generally no fever, but, on the contrary, the temperature ranges from 97° to 98°, or even lower; tormina and tenesmus disappear; the actions are moderately large, streaked with blood and mucus, very offensive, and are followed by a sense of relief, which is so strikingly different from dysentery simple. The

thirst abates notably, the pulse increases in rapidity and loses in strength. Nausea begins to develop, and later on vomiting supervenes and becomes the most troublesome and dangerous symptom. Palpation of the bowels will reveal, as a rule, more tenderness around umbilicus and in right iliac fossa than along the course of colon. Borborygmi and tympanitis are heard over the entire abdomen wherever auscultation and percussion are practiced—the former more especially over small bowels, the latter along transverse and descending colon. The duration of cases that end in recovery is from two weeks to a month. The prognosis grave—for the fatality in many localities was as high as 25 per cent.

Never forgetting that dysentery is really a disease of constipation, a purgative is of course the first thing to be given. I prefer calomel, followed by castor oil. The salines are often efficient, but frequently defective. They do not *empty* the bowels as does oil. Watery discharges, often repeated, follow their administration, and still sciballæ and other offending substances are not certainly dislodged. After being sure that the bowels are cleared, then opium. For the tormina and tenesmus of simple dysentery no better adjuvant of opium can be had than the warm hip bath.

The success of the ipecuanha treatment is so well attested to by competent and honest observers, and sustained by statistics so satisfactory and overwhelming, that to attempt to refute or deny it would be idle.

But when the symptoms I have detailed are present, its employment borders on madness. Still, I have known more than one doctor to keep it up

until his patients died; and happily for the sufferers, the evil day was not long delayed.

No opium is given, but where there is so much derangement of the digestion, is it absorbed? The patient does not sleep after its repeated administrations in large doses, *per orem*—opium is a soporific—his actions are numerous—opium is an astringent—clearly something is wrong. I once prescribed three grains of morphine in three ounces of water, and directed that a teaspoonful be taken after each action. In twelve hours the patient took the entire quantity; in other words, had 24 actions during that time. A hypodermic injection of $\frac{1}{2}$ gr. of morphine in this case carried the same patient through the next twelve hours without an action on his bowels, he sleeping most of the time. “Medicines, to exert a remote effect on the economy, must be absorbed into blood or internal fluids of the body” is an axiom of Headland, that it would be doubly well for us to consider when treating the disease in question.

For the persistent nausea and vomiting, first of all give the stomach rest by withholding food and medicines. Medicines given to “settle” the stomach do more harm than good as a rule. Get rid of the idea that your patient will die of starvation in a few days. Remember, that food not digested is on a par with medicines not absorbed.

A mixture of one teaspoonful each of turpentine and mustard to a teaspoonful of lard rubbed over bowels, or applied to the face of a poultice, relieves the tympanitis very often, and also the nausea, and it frequently does away with the necessity for a blister. A vesicant is, however, in some cases indispensable, and should cover the entire abdomen; but remember not to blister too deeply. Let it remain on only a few hours; watch it closely and remove on the first appearance of goose flesh; put back the poultice; it

will cause it to fill. The contraction of the capillaries that is caused by a superficial blister is persistent; whereas if the vesication be deep, dilatation of them supervenes.

I had a patient last summer who rejected everything given by the mouth, even pledges of ice—absolutely everything for eight days, although she had been blistered—who was saved by hypodermic morphine every six hours.

In a case recently under my care that vomited so persistently, morning and night I used morphine and atropine hypodermically, and had laudanum and starch given per rectum after each action. A recovery was made in ten days; during five of these no aliment, water (carbonated) or otherwise was retained; no blister was used.

In each of these cases, and in a number of others—in fact in a large majority of all under my care, buttermilk is better borne and more relished than sweet milk. Clinically, my practice of allowing buttermilk, its salutary effect and the philosophy of it, is explained by recent German and French chemists, declaring that “their experiments convince them that the digestion of sweetmilk is nearly, if not quite, altogether accomplished in the small intestines.” Buttermilk has less fat and casein in it than sweetmilk, hence leaves less for small bowels to do, giving them the best of all treatment, physiological rest. I am sure that too much stress cannot be placed on the quality of the milk given.

To Vaughn we are indebted for the discovery of tyrotoxicon, an alkaloid that generates in milk, and that is so poisonous. Many cases of unaccountable relapse can, I am persuaded, be traced to the use of impure milk containing this alkaloid.

To children buttermilk is not grateful; my results with the peptogenic milk powder of Fairchild are so gratifying that I bear cheerful testimony to

its undoubted virtue. I am well assured that I have saved the lives of several children by its use. In convalescence from this disease, whether the patient be an adult or a child, I know of no better way to hasten it, and nourish the patient, than to have the milk digested with their powder. It relieves the enfeebled digestion of much work, and thereby prolongs the rest which is so essential to all repair.

It would be an insult to this presence were I to enter into details of treatment—to mention, for instance, that the nourishment, whatever its character, should be given in small quantity and at short intervals; that bismuth in large dose would act as a sedative, absorbent and astringent; that the opium should be given for effect and not by measure; or that creosote or carbolic acid would rapidly correct the fever, etc.

To summarize and finally.

1. The disease may begin as dysentery, but therapeutically it rapidly becomes, or is complicated with enteritis.
2. Enteric symptoms exclude mercurials, ipecac and purgatives of all kinds.
3. The failure of digestion makes medication (almost) *per oreum, nul.*
4. The nausea is best treated by rest—i. e., giving nothing *per oreum*.
5. A superficial blister is better than a deep one.
6. While asthenia is a factor in the fatal termination, food not assimilated is an irritant.
7. The superiority of buttermilk over sweet milk in many cases.
8. The value of peptonized foods.

—*Atlanta Med. and Surg. Journal.*

SUMMER DIARRHŒAS OF INFANCY AND CHILDHOOD.

BY LOUIS STARR, M. D., PHILADELPHIA.

The diarrhœal affections of hot weather may be grouped under two heads, namely: 1st, ordinary summer diarrhoea, or entero-colitis; and 2d, cholera infantum. The former is the more common and the more manageable, and so far from being a mild type of the latter, is a distinct disease, requiring its own methods of treatment.

First: Summer diarrhoea, or entero-colitis: Therapeutic measures often fail in relieving this condition when uncombined with rigid enforcement of the general rules of health. The main hygienic features to receive attention are the following: Fresh air must be secured by taking the child to a public square in the cool of the morning and evening, or, better still, by a morning or evening trip on the water. The heat of the day must be spent in as cool a room as can be had. Coddling is to be discouraged, as many a stout mother

has hastened her infant's death by too fond and constant nursing in the arms. The clothing must be as thin as possible, provided that woolen be always worn next to the skin. Twice or three times a day in very hot weather, the whole surface of the body must be sponged with water at a temperature of 80 degrees Fahr., and dried with gentle rubbing. The addition of rock salt renders these baths more bracing. Full warm baths must supplant the cold spongings if there be much prostration.

The diet is to be most carefully regulated as to quality, quantity, and intervals of administration. Sound cow's milk must form the basis of the food in bottle-fed babies, and peptogenic powder is a very useful addition to it.

Medicinal treatment varies with the case. Should the patient be seen early in the attack, it is initiated by a laxa-

tive. A teaspoonful of castor oil with ten drops of paregoric, or the same quantity of spiced syrup of rhubarb, is sufficient for an infant of one year. Afterward, while the stools are yellow, homogeneous, and not very frequent, alkalies and astringents are employed:

- R. Sodium bicarb, 36 grains.
Syr. rhei aromat, 4 drams.
Mist. cretae, q. s. ad 24 drams.

M. S. One teaspoonful every two hours for a child of one year.

When the stools are frequent, green and acid in reaction, the following may be employed:

- R. Syr. rhei aromat, 4 drams.
Bismuth subcarb, 2 drams.
Syrupi acaciae, 4 drams.
Misturae cretae, q.s. ad 24 drams.

M. Sig. 1 dram every 2 hours. At the same time the abdomen is to be reddened two or three times a day, with a weak mustard draught—one part of mustard to five of flour.

If the evacuations be liquid and contain whitish or greenish flakes, and the above treatment fail after a fair trial, good results often follow a short mercurial course, thus:

- R. Pulv. ipecac. comp, 2 grains.
Hydrarg. chlor. mit, $\frac{1}{2}$ grains.
Cretae preparat, 36 grains.

M. ut ft. chart, No. 12. S One powder every two hours for 24 or 48 hours, or until the stools become yellow or homogeneous.

Should the stools be frequent and serous, more powerful astringents are used, as aromatic sulphuric acid, silver nitrate, or zinc oxide. When the stomach is very irritable, rectal injections are resorted to, the drugs used being tincture of opium, nitrate silver and ipecacuanha. Ipecacuanha is chosen where there is much tenesmus with the discharge of blood and mucus. It may be administered as follows:

- R. Ext. ipecac. fl., 12 minims.
Tr. opii deod, 8 min.
Mucilag. acaciae, q. s. ad 8 drams.

M. S. Inject one tablespoonful every four hours.

Stimulants—wine of pepsin, brandy or whisky—are given in all infantile cases where there is prostration.

In cases of recovery, the diet and hygiene must be carefully watched until all danger of a relapse has passed,

the astringents are gradually dropped, and digestants and tonics ordered.

The antiseptic treatment recommended by L. Emmet Holt, I have lately tried with good results. It embraces the careful attention to regimen already alluded to, preliminary evacuation of the bowels with castor oil, and the administration of naphthalin or of sodium salicylate. Naphthalin is usually ordered as in the following prescription:

- R. Naphthalin
Ground coffee, a. a. 6 grains.
Sugar of milk, 24 grains.
M. ut ft. chart No. xii.
S. One powder every two hours.

In conclusion it may be well to draw attention to the fact that the key note of successful treatment seems to be the maintenance of constant circulation in the contents of the intestinal tract. The object of this is to sweep irritating faecal matter or secretions away from the intestinal mucous membrane and give the latter an opportunity to recover from the catarrhal inflammation affecting it. Castor oil and calomel are the best drugs to accomplish this, and small, frequently repeated doses are to be preferred to single large ones, active purgation being undesirable. With bowels so swept, a bland, unfermenting diet, and attention to the health rules already mentioned, every aid is furnished to secure the successful action of such remedies as bismuth subcarbonate, naphthalin and sodium salicylate.

On the other hand, should opium be used to lock the bowels, one great factor in the causation of the disease is fortified in its position, and an increase in the degree of inflammation almost invariably results. The opium used in the foregoing prescriptions is only intended to prevent griping or to secure retention in the case of the injection; not for the purpose of checking peristaltic action of the intestine.

In some cases, particularly where there is irritability of the stomach, milk

in no matter what form or how prepared, seems to keep up the disease. Under these circumstances my plan is to order one or two teaspoonfuls of raw beef juice every two hours, according to age. This diet may be continued for several days, until the vomiting stops and the movements improve in character, when a milk diet may be resumed.

One must not forget that a change of climate is a most efficient method of treatment, especially when the seaside is the objective point.

Second. Cholera infantum: The large and frequent watery evacuations characteristic of this disease are such a drain upon the system that it is of the first consequence to replace the waste by food and drink, and at the same time check it by appropriate treatment. The irritability of the stomach is a formidable barrier to alimentation, nevertheless every effort must be made to give food in small quantities and at short intervals. Should the infant be at the breast, it may be allowed to nurse for a few minutes every half hour or hour. If hand-fed it may be given the foods suitable in entero-colitis, or in chronic vomiting, in such quantities as can be retained and at intervals corresponding in frequency to the smallness of the amount. Bits of ice and water should be allowed freely, even though they be rejected as soon as swallowed.

To check the diarrhoea opium and astringents are necessary. A very serviceable formula is the following:

- | | | |
|-----------------------------|--------------------------|--|
| R. Liquor morphinae sulphat | 1 drachm | |
| Acid sulphuric aromat | 24 minimis | |
| Elix. curacoæ | 4 drachms | |
| Aquæ, q. s. | ad 24 drachms | |
| M. Sig. | One teaspoonful p. r. n. | |
- M. Sig. One teaspoonful every two hours for a child two months old.

With this, two drops of laudanum, suspended in two teaspoonfuls of starch water should be given by the rectum every three hours. Two or three times

daily a mustard plaster, one part of mustard and five of flour, must be applied over the whole surface of the abdomen long enough to redden the skin, and the whole body should be sponged several times a day with water at a temperature of 95° F.

The clothing, diapers and person must be kept perfectly clean, the sick room must be as large and airy as can be commanded, and the infant must lie upon a bed and not be constantly nursed on the lap. If it be possible, the patient should be sent early to the seashore or country, as this affords by far the best chance of recovery. Failing in this, morning and evening airings in a coach or daily steamboat excursions must be resorted to.

Stimulants are needed from the first, to ward off prostration—from five to ten drops of whisky in a teaspoonful of limewater may be given every two or three hours, at the age of six months.

When collapse sets in, the quantity of alcohol must be increased, and, if the stomach can bear it, a combination of stimulants is useful, as:

R. Spt. frumenti	4 drachms
Ammon. carbonatis	24 grains
Syr. acaciæ	8 drachms
Aq. menthæ pip. q. s.	ad 24 drachms
M. Sig.	One teaspoonful p. r. n.

The temperature must be maintained by hot flannel wraps and hot water bottles, and the child be kept in a horizontal position and disturbed as little as may be.

In this stage astringents are still indicated, but opium must be used with great caution, or even discontinued entirely, when there are cerebral symptoms and semi-coma.

In the fortunate instances in which this plan is successful, it is necessary to treat the succeeding diarrhoea, and to build up the general health by good food, tonics and fresh air. — *Medical Standard.*

TREATMENT OF SUMMER DIARRHŒAS IN CHILDREN.

BY S. HENRY DESSAU, M. D., NEW YORK.

I have for the last five years entertained fixed views in regard to the causation of summer diarrhoeas in children, which dictate my treatment. There is no doubt in my mind that heat is the great disturbing element in the various forms of this disease. Writers on this subject, it will be observed, have recently begun to adopt this view by accepting the term "summer diarrhoea," as including all forms of intestinal disorders occurring in summer, it being preferable to the former distinctions made, such as intestinal catarrh, which is not limited to any season, entero-colitis, cholera infantum and the like; all of which may be regarded as manifestations of the same cause, differing only in one degree.

In the milder form of summer diarrhoea in infants which are either partly wet-nursed or artificially fed, ignorance or carelessness allows fermentation to occur in the food, and either germs or ptomaines (the product of germ growth itself, the result of the heat action on food) cause the diarrhoea.

In the case of milk foods for artificial nursing, it is the partial decomposition which has taken place, favored by the heat, that in all likelihood causes an abnormal fermentation to be continued in the stomach, with the consequent development of ptomaines, in abundance, poisonous in their action, which produce irritation of the intestinal circulation. It has been demonstrated that diarrhoea caused by eating partially decomposed food has been checked by the use of sour milk, or its principal element, lactic acid. This may be explained either by the fact that one species of germ has the property of neutralizing the growth of another, or that an acid medium is unfavorable to their growth.

In these mild cases, the first object is to rid the stomach and intestines of the

irritant matter, if there be any probability of its presence. This is best done with either the old-fashioned dose of castor oil, or what is less disgusting and perhaps more efficacious, a dose of calomel combined with sodium bicarbonate. For an infant under 1 year of age, I give 2 grains of calomel and 3 grains of soda; from 1 to 2 years of age, 3 grains of calomel and 5 grains of soda.

Secondly: Greater care is urged in the preparation of the food and attention to details, such as keeping the nursing bottle thoroughly cleansed by scalding it out, immediately after nursing, and keeping it filled (when not in use), with a solution of borax. I prefer the graduated nursing bottle, as it has no tube and is easier to keep clean. The nipple should be kept in a glass containing the solution of borax. All other utensils used in the care of children should be kept scrupulously clean.

The kind of food is of paramount importance, or otherwise, healthy children, deprived of the breast or having a scant supply of mother's milk, there is nothing so good as pure cow's milk or some one of its products. Where it can be produced, as in large cities, I prefer the fresh condensed milk, delivered daily, but otherwise unadulterated cow's milk will answer. Where there is previous digestive disturbances, the "malted milk" appears to be the best artificial food for infants.

In many cases further therapeutic measures will hardly be needed, but if there be indications for such, I give a combination of calomel, or mercury with chalk, and bismuth subcarbonate or subnitrate, either in powder or mucilage of tragacanth. My object is to restore the normal intestinal circulation by inviting the excess of blood to the liver, which is the principal compensating organ in the arrangement, and to check further irritation from the pro-

ducts of germ growth by the antiseptic action of the bismuth.

In the several forms of summer diarrhoea in children, depending partly upon the effect of heat as already shown in the decomposition of food, and furthermore upon foul air from filth fermentation, and in a large degree by the direct depressing effect upon the cerebo-spinal nerve centers of prolonged heat above a certain degree, (more especially where this atmospheric condition obtains during the night) my chief aim is to overcome the exhausted state of the nerve centers, either by the use of cold baths, cold enemata, the hypodermic use of stimulants, as camphor, brandy, quinine in small doses, or chloral hydrate where there is a collapse, as in cholera infantum. Cold baths at a temperature of 60° F., are given where the body temperature as indicated by the thermometer is above 104° F. The bath is not continued for more than five minutes, and rather less if there be a tendency to cutaneous congestion. The body is rapidly dried with friction from a coarse towel and afterward enveloped in a blanket to invite reaction. Cold drinks are given if there be much thirst, even if they are again vomited. For infants under a year, iced toast-water is preferable. If the symptoms be severe, I prohibit the use of all food other than the toast-water, barley-water or albumen-water, as may seem preferable, until amelioration has resulted. These are all given cold with cracked ice. Afterward, it is better to begin feeding with either koumiss, kefir or matzoon; all of which preparations of fermented milk contain alcohol and carbonic acid gas.

In giving hypodermic injections I select the buttocks as the most eligible point of insertion. I use one grain of quinine or cinchoniodine hydrobromide

in solution, repeated once daily, as often as the body temperature rises above 103° F., one to three drops of camphorated oil, and five to ten drops of a 10% solution of chloral hydrate. The hypodermics of chloral are used only in the severest cases of cholera-infantum where there is marked and rapid collapse. It need not be repeated oftener than once or twice at hourly intervals.

If the diarrhoea be not attended with a high temperature nor other symptoms of heat prostration, but if severe, I employ some one of the internal antiseptic remedies, as sodium sylicylate, bismuth salicylate, naphthalin, or carbolic acid; always clearing the bowels first with calomel and soda. Perhaps the best internal antiseptic, if it be such, in my experience, in the treatment of summer diarrhoea in children, is corrosive sublimate. Especially is this true if the large intestine be deeply involved, even to the extent of dysentery. Its best effects are obtained from the $\frac{1}{100}$ to the $\frac{1}{50}$ of a grain, repeated every two hours.

In the stage of reaction from the severer forms of summer diarrhoea in infants, or what is known in the books as hydrocephaloid disease, where there is great restlessness due to cerebral anaemia, I give the potassium-tartrate of iron as the best ferruginous tonic, and keep the head covered with hot water applications. Diffusible stimulants are given at the same time. Small quantities of chloral are carefully given to allay nervous irritation until the blood has become enriched with more corpuscles from the action of the iron.

Fresh air, preferably sea air, is advised on all occasions, and in the younger class of infants all shaking up in handling is strenuously forbidden, as the utmost quiet is all important.—*Med. Standard.*

THE ETIOLOGY AND CLASSIFICATION OF THE ANÆMIA OF PUBERTY.

BY E. MACDOWEL COSGROVE, M. D., F. K. Q. C. P.

A large number of girls suffer during puberty from a condition of ill-health characterized by a very constant train of symptoms, and to which the names anæmia and chlorosis are applied. Although the disease is so common, its symptoms so plain, and the treatment, as a rule, so successful, the etiology is by no means well established, various theories being put forth by different writers.

Trousseau considered it a neurosis, the blood changes being secondary. Niemeyer appears to consider it as a result of premature sexual activity. He writes: "According to my observation, obstinate chlorosis attacks all young girls without exception in whom the menses have appeared in the twelfth or thirteenth year, before the development of the breasts and pubes." Mitchell Bruce says the origin of the disease lies in a peculiar condition of the blood and blood vessels, which is believed to be congenital and perhaps hereditary. Aitken considers chlorosis as one of the "functional diseases of the female organs of generation in the unimpregnated state." Sir Andrew Clark considers "faeculent retention and its consequences" as the cause. See looks upon the inability of the organism to meet the demands upon it by the simultaneous advent of menstruation and of rapid growth of the tissues as the cause.

A great many predisposing and exciting causes have been described by various authors; most of these seem to be not so much causes as merely coincident with the time of life at which the disease begins, but generally speaking all things are causes which lessen metabolism and the power of the system to meet the demands made upon it, such for instance, as want of

exercise, improper food, and vitiated air, and the variety of the disease caused will depend greatly upon the force and direction of these causes.

The distribution of the disease bears this out. It is not confined to any class, but is more often met with in large towns than in the country, and is much more common among girls who sit at their work than amongst others. When it does occur amongst servants, defective drainage is often an exciting cause. In Dublin the disease is very common; yet in Huddersfield, where the great majority of the girls work from an early age in mills, it does not seem to be common, as, on looking over the notes of more than 600 cases treated there consecutively, I find only three examples of the disease, and one of these girls is especially noted as having a "sitting job" in a mill. The chief differences between the girls in Yorkshire towns and those in Dublin are that the former are better fed and have more exercise, both at their work and after it.

But, although these causes are generally met with, sometimes they are absent, and the disease occurs in girls of good physique, living in country air, warmly clad, and well fed.

In Sir Andrew Clark's paper the graphic description of the patients, only dealt with one variety of the disease—that generally termed chlorosis; but other well-marked varieties of the anæmia of puberty are met with. I would venture to propose the following classification:

1. Fat anæmia, where there is a well-marked deposit of adipose tissue.

2. Anæmia of overgrowth, where there has been well-marked general increase of growth without much deposit of fat.

3. Anæmia of general malnutrition.

The first and second and second and third may overlap, but never the first and third. In the first variety the symptoms of anæmia generally follow the deposit of fat in the tissues; in the second they follow the appearance of the menses. The second and third (those in which there is no deposit of fat) are liable to be complicated by tubercular disease.

In spite of the great weight of Sir Andrew Clark's experience, I cannot look upon constipation as even an important cause of this anæmia. Constipation and anæmia are often associated, but very often the constipation is not greater than would be expected from the general sluggishness of the functions, and is similar in significance to the copious, pale urine, of low specific gravity and deficient in urates, so generally associated with this anæmia. That the constipation is accompanied not only by torpidity, but also by loss of power, is shown by the failure of belladonna and nux vomica to relieve it.

Another argument against constipation being the cause of the disease is that cure often follows the use of iron in the form of Griffith's mixture or Blaud's pills, without any purgatives being administered.

Habitual constipation is a common complaint, and as long as the bowels are evacuated regularly, uncomfortable symptoms seldom arise, no matter what the interval between the motions. There seems to be no reason why constipation should at one age and in one sex cause this characteristic train of symptoms, and produce none of these symptoms at other times.

In some curious cases the constipation is persistent throughout life, but is not accompanied by any definite symptoms except at puberty and the menopause, at both of which periods there is palpitation with shortness of breath on exertion. In one case, at present under observation, there has been

obstinate constipation, as a rule not more than one motion in nine days; the patient is now forty, and it is only quite lately that the palpitation and shortness of breath have appeared.

With regard to the occurrence of the menses, my experience is very different from that of Niemeyer. Early development and not permanent menstruation seems the rule. Often the anæmia sets in without any appearance of the menses, but in many of the cases there has been a slight appearance from one to three or four months, and then either a total cessation or an occasional slight appearance for a month or two, and then several months without any.

Generally speaking, I have found that in the anæmia of general malnutrition the menses may be absent, scanty, or, in rare cases, normal. In the anæmia of overgrowth there is an attempt at establishment of menses without development of the breasts, etc. The beginning of fatty anæmia is coincident with the development of the breasts, etc.

In the fatty anæmia there is certainly an hereditary acquired causation. It is very common to find several sisters affected. In one family I have noted four, in another three, and in several two so affected. In these cases I have often found that the mother has been married early in life, and I have learned to look upon this as an important factor. In one family of good means, and living in the country, the mother was eighteen years of age at the birth of her first child. She had had five sons and three daughters; all the sons have been very strong, but the daughters, although when young, strong, and of healthy color, have all passed through well-marked fatty anæmia. In another case the mother never suffered from anæmia; her first child, a daughter, was born when she was only seventeen; the child is now rapidly getting stout, has no appearance of the menses, and is, in fact, passing into fatty anæmia.

Another very interesting point in this variety of anæmia is, that if any strong call in a particular direction is made upon the system, it will be able to meet it; thus, there is generally marked shortness of breath and palpitation upon going up stairs, and but little whilst walking not too rapidly on level ground, yet domestic servants so anæmic as hardly to be able to walk on level ground, will sometimes be able to carry heavy weights up stairs. This I have never observed in the other forms of anæmia.

A most important contribution to the etiology of the disease has been made by Benke, who has shown that the annual increase in the heart and blood-vessels in girls up to puberty is 8 per cent. per annum, whilst during the establishment of menstruation it is 80 to 100 per cent., so that if puberty is established in a single year, an extra growth of from 70 to 90 per cent. weight, in addition to ordinary growth is entailed, and that at the end of puberty the lungs have arrived at the fullest development, and the excretion of carbonic acid gas has reached its highest. There is no such rapid change in the male.

Professor Bowditch says that, up to eleven or twelve, boys are, on the average, taller and heavier than girls; for the next two or three years girls have the advantage, whilst after fourteen or fifteen boys again excel in strength and height.

It is probable that the rapid development of the female is to be found in sexual selection. Men generally choose wives younger than themselves, and so women who are early sexually mature are most likely to be married and have offspring. In time this might cause a rapid maturity, and a general tendency would be emphasized in the offspring of mothers who were married young.

The parts affected in this rapid development are the various tissues derived from the mesoderm. The

white cells and blood corpuscles, the heart and blood vessels, the reproductive organs, and the supporting and connecting tissues are chiefly affected. During puberty the mesoderm is largely called upon by the rapid growth of the organs concerned in generation. If the system is unable to meet the demands made upon it, anæmia results. If badly under nourished, the system is almost certain to fail to meet the extra demands, and the anæmia of general malnutrition is established. If, at the same time the rapid growth of the organs of circulation and reproduction is set up, there is active growth of the bones, muscles, and other tissues, the system may be overtaxed by the further demand, and the anæmia of over-growth gradually appear. In a third class of cases the mesodermal energy is misdirected, and instead of the demand being supplied, an excessive amount of reserve tissue (possibly resulting in part from deficient oxidation) is formed, and fat anæmia develops.

That there is not only an accumulation of fat, but a deficient growth and a fat substitution is shown by the aorta of small calibre and the unequal thickness and fatty metamorphosis of the intima, which are so well marked as to have led to the idea that the cause of the disease is a congenital condition of the blood and blood-vessels.

With regard to prognosis and treatment, I would add only a few words. In the variety of anæmia associated with the deposit of fat there is sufficient, but misplaced, vitality, and cure may be looked for. The treatment is two-fold, specific and symptomatic. Iron may fairly be called a specific; introduced in quantities far exceeding the ordinary needs of the system, it does good, and often, without any assistance, cures. Dr. Oswald Schmiedeberg says: "The possibility cannot be denied that under conditions otherwise favorable and necessary to the cure, the formation of red blood corpuscles may

be forced, even by an increase of the iron absorbed, though in itself minute, is kept up a considerable time, because of a long-continued extra supply of the metal."

It seems probable that the iron acts by modifying the mesodermal growth, and checking the excessive formation of a reserve material. Arsenic and the mineral acids also do good, but I believe not so rapidly.

As bearing on the specific action, I may mention that the syrup of iodide of iron has seemed to me to act much more rapidly and effectively than the syrups of the phosphates and of the hypophosphites.

The form in which the iron is given must vary with the necessities of the case. As a rule I prefer four or five grains of the iron and aloes pill of the *B. P.* each night and morning. In this combination I have never found iron disagree. If there is a catarrhal condition of the mucous membrane of the stomach, I use a mixture containing sulphate of magnesia and sulphuric acid, either adding sulphate of iron to it or ordering the myrrh or iron pills of the *B. P.* In some forms of dyspepsia the sulphate and carbonate of magnesia with aromatic spirits of ammonia in a bitter infusion act well in conjunction with the iron and myrrh pills. Very rapid improvement follows the use of the solution of the perchloride of iron,

B. P., but some people cannot take it; I find, however that it disagrees with comparatively few since I have prescribed it (on the suggestion of my friend Dr. Cameron, of Huddersfield) with an equal quantity of spirits of nitrous ether.

Hygienic treatment is also important. Fresh air, good food (especially meat), and moderate exercise are useful, but over exertion is hurtful, and tends to prolong the anaemia, or even to render it permanent.

In the anaemia from overgrowth the prognosis is generally good, but the possibility of tubercular disease must not be overlooked. Fresh air, nourishment (especially milk), and comparative rest are all important. It has not seemed to me to be so necessary; when given it is generally best in the form of the syrups of iodide of iron and of the phosphates.

In the anaemia of general malnutrition the prognosis is bad; the excessive demand comes upon a system badly able to fulfil its ordinary duties, and permanent debility generally results. In such cases, country air, perfect rest, and plenty of milk and other easily assimilated food, with cod-liver oil, is what is required, and medicine is of secondary importance. I have found most benefit from the sulphate of iron, quinine and magnesia, in combination with hydrobromic acid.—*British Medical Journal.*

A LOCAL TREATMENT FOR VAGINISMUS AND VAGINITIS.

BY N. GUHMAN, M. D., ST. LOUIS.

As it is my purpose to give only a local medical treatment for the disease I have mentioned, I do not think it is necessary to go into the pathology of them or to mention all the causes that may produce them.

Vaginismus, as you all know, consists of a hyperesthesia of the nerves supplying the mucous membrane and

muscles of the vagina, and its orifice, which upon being irritated produces a spasmodic contraction of the sphincter and other vaginal muscles. This condition may be due to functional or local causes, more often the latter.

Vaginitis is an inflammation of the lining membrane of the vagina, and it may be of a specific or a non-specific

character. This disease is often connected with vaginismus.

In the treatment of these troubles the first step is to remove the cause, if this be possible.

In vaginismus you are aware that it is not easy to introduce a speculum, or even the finger, into the vagina, with-
out considerable pain to the patient.

My method of proceeding in these cases is to place the patient on her back, the pelvis somewhat elevated and the knees flexed. I either introduce a bivalvular or a small cylindrical speculum. I prefer the former, as on count of its flatness it is easier introduced. Before introducing it, however, I lubricate it with vaseline, and then take a camel's hair brush and apply a four per cent. solution of cocaine both to the speculum and to the orifice. I then introduce the speculum into the vagina and very gently open the blades. By this means I give the patient very little pain. After placing a small roll of cotton beneath the speculum across the perineum, I pour into the vagina through the speculum, a solution compound of sulphate of zinc one or two grains, chloral hydrate five grains, water and glycerine of each four drachms. I wait several minutes and then withdraw the speculum slowly but not completely out of the vagina.

As I withdraw the speculum, the walls of the vagina come together and the solution touches every portion of

the mucous membrane. I now push the speculum back again, and introduce a small cotton tampon with a string tied to it, pushing it back with a long dressing forceps, at the same time withdrawing the speculum.

The tampon will absorb that part of the solution which remains in the vagina, and that which escapes will be absorbed by the cotton on the perineum. I now place a piece of cotton between 13 Local treat. for vaginismus, etc. the labia, apply a bandage and the operation is complete.

I let my patient remove the cotton and withdraw the tampon in from four to six hours afterward.

I repeat this treatment three or four times a week. After the first treatment I have no need for the cocaine, as the finger or speculum can be introduced without giving much pain.

In vaginitis I proceed in the same way except I do not use the cocaine solution.

In vaginitis the chloral acts as an anesthetic to the mucous membrane and vaginal muscles.

Between visits I have my patient to use vaginal douches of hot water with a little borax added to it.

By this treatment I have secured excellent results, and my patients and their husbands (if they had any) appreciated it very much in vaginismus.—

Weekly Medical Review.

CASTRATION IN EPILEPSY.—In the *Berliner klin. Wochenschr.*, No. 3, 1887, J. Schramm reports two cases in which he performed castration for epilepsy. In the first case the ovaries were healthy, and the operation was done on account of the coincidents between the epileptic attacks and menstruation; in the second case the ovaries were cystic, but the connection

between the epileptic seizures and menstruation was not so positive. Immediately after the operation, repeated convulsions occurred, but subsequently ceased entirely. In the first case there was no return of the disease within eighteen months; in the second, within a year after the operation.—*Medical and Surgical Reporter.*

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EDITORIAL.

NATIONAL ASSOCIATION OF RAILWAY SURGEONS.

A preliminary meeting for the organization of a National Association of Railway Surgeons was announced in our last issue. Being interested in the subject, we attended, to find out the aim and scope of the organization. We were surprised to find the interest taken by so many men coming from every part of the country.

From New York to Minnesota, from Michigan to Alabama, were representatives numbering over three hundred, and representing nearly seventy lines of railroad.

The association starts out with a membership of nearly double the number in actual attendance, and bids fair to become one of the most prominent medical or surgical organizations in the country.

It is an undisputed fact that railway surgery differs as much from ordinary surgery as does military from civil surgery. This being true, there is abundant reason for an association of men devoted to the practice of that branch of the surgical art.

The following officers were elected for the ensuing year, and a committee appointed to draft a constitution to be submitted at the next meeting, to be held at St. Louis in 1889:

President—Dr. J. W. Jackson, Kansas City, Mo.

First Vice-President — Dr. J. H. Murphy, St. Paul, Minn.

Second Vice-President — Dr. J. B. Murdock, Pittsburg, Pa.

Third Vice-President — Dr. A. W. Ridenour, Massillon, Ohio.

Fourth Vice-President — Dr. B. L. Hovey, Rochester, N. Y.

Secretary—Dr. C. B. Steman, Fort Wayne, Ind.

Assistant Secretary—Dr. J. H. Tresel, Elliance, Ohio.

Cor. Secretary—Dr. E. R. Lewis, Kansas City, Mo.

Treasurer—Dr. J. H. Reed, Mansfield, Ohio.

The date for meeting was left to the Executive Committee, and will be made

so as not to conflict with dates for other national associations.

The discussions at the Chicago

meeting were chiefly upon the subjects of when to amputate, and injuries to the spine.

SOME CURIOSITIES IN MEDICAL LITERATURE.

A curious old book entitled, "A Synopsis of the History and Cure of Venereal Diseases," has recently come into our possession.

It was printed in London in 1737, and gives a synopsis of the older writers upon venereal diseases taken from the famous "Venetian collection," published by Boerhaave.

For the benefit of such of our readers who may be interested in the older literature of the subject, and yet may not have the opportunity of consulting such rare works, will give some extracts from the book:

Sebastianus Aquilianus (1498) says: "This disease (syphilis) is the same with the elephantiasis as described by Galen, Celcus and Pliny. Almost all who have been seized with this malady have caught it by coition, by sleeping with the affected, by their milk or some other contagious way. Tho' I believe the air, too, in some measure contributes to the production of this disease."

The steps to be taken in the cure are these: "The patient must first be blooded, if his years and strength permit. In the next place he must use the mild, detergent antiscorbutick medicines and phlegmagogue and melanagogue purges mixed with these. After this, to make a derivation to the skin and to remove the pustules, detergent drying antipsoric ointments and emollient baths are alternately to be used, the ointments one day and the baths the next. After proper evacuations,

you must endeavor to mitigate the pains, etc., etc."

This author used mercury very sparingly, and only in those who had strength to bear a cure with it.

Nocolaus Massa, of Venice, (1563) gives about the same etiology, but puts greater stress upon its communicability by "perspirable matter and other tainted fluids." He believed much in the efficacy of bleeding, saying "he saw two young men cured of this disease by only bleeding at the ankle till they fainted." The translator naively adds, "but I am afraid that it was not absolutely clear that those two cases were venereal." Massa had great faith in guaiacum for the pox. He says:

"It cures the whole train of symptoms that attends the pox, even to the asthma itself, and if prudently administered is a friendly medicine to both young and old, and the milk of a woman that uses it is a safe and effectual cure for pocky infants. It was given in a strong decoction of the wood, and to be followed by a two-hour sweat."

"Salsa Parilla" and China Root were also used, while of mercury he says:

"But the most infallible method of cure and which most secures the patient is that of mercurial ointments. This is no new practice, for mercury was commonly enough used in this manner

against the scabies and other diseases long before the French disease broke out.

Mercury administered in ointments digests the phlegmatick matter of the whole habit, prepares the humours for sensible or insensible discharges and corrects their malignity. It mitigates the venereal pains, heals the pustules, resolves and ripens the apostems, digests, deterges, and consolidates the ulcers."

The following is the formula for his ointment:

R.	Axung Porcin	1 pound
	Pingued Gallin	3 ounces
	Ol. Lili. alb	1½ ounces
	Mercur(vel plus si oportet)	5 ounces
	Oliban	
	Mastich	
	Salv	
	Stzechad	
	Lithrargyr.	
	Ceruff	aa 1 ounces
	Aq. vit.	2 ounces
M.	& in mortat Lapid. terendo redigantur in Formam urgunti. Quod per Dies 2 aut plures quiescat in fermentetur."	

After reading the following we begin to wonder whether the next author will not advise the oleates or succus alterans, scarcely believing that over three hundred years have passed since it was written. It almost reads like a "great recent discovery."

"When gentle remedies have been tried without success, we must have recourse to more violent means.

Thus when purging is not sufficient to perform the cure, we must try what guaiacum or mercurial ointments will do. When these, too, fail, fumigation is the last refuge. * * * In short, none but strong patients must pretend to tamper with this method, and those only when the disease is very malignant, has been of long standing and has baffled all other remedies."

He directs that the patient be placed in a close sweating box and one-half ounce cinnabar and two ounces oliban be put upon live coals in the box. If he

cannot endure the smell of the fumigation, let his face be exposed to the free air. This to be repeated every day or every third or fourth day, according to his strength.

Jacobus Cataneus, of Genoa, (1516) says:

"This new disease first broke out in the kingdom of Naples in 1494. It is owing to a poison in the menstrual blood communicated to the general mass of fluids." He also used mercurial ointments, placing the patient "betwixt two fires and strongly rubbed from the shoulders down to the hands and from the coxae all the way down to the feet. This must be repeated twice every day, viz: After dinner and after supper, till the teen begin to ach, but no longer. * * *

The flesh and broth of vipers are very good against this disease, as is also the wine wherein they have been infused alive. The patient must, however, be sparing in the use of vipers at first and increas the quantity by degrees."

Hieronimus Fracastorius, of Verona, (1530) says:

"This disease broke out about the same time in most of the countries of Europe and spread itself over a great part of Asia and Africa. It was about the year 1490 that it first appeared in Italy. Tho' it was quite a new disease to all these parts of the world, the first discoverers of America inform us that it was a native of that new world and as familiar to the inhabitants of some parts of it as the scabies is to us. But as it appeared at once in so many different places, and as a great many catched it without contagion, I am apt to think it was rather owing to some general cause in the air proceeding from malignant conjunctions of the stars than to our commerce with the new discovered world."

Laurentius Phrisius, of Metz, (1532) says:

"This disease is now become more obstinate against remedies than it was formerly. * * * As for mercurial

ointments, their use is attended with such dangers that none but quacks venture to deal in them."

ABOUT PEORIA DOCTORS.

DR. H. KRUSE, the well-known oculist of this city, left July 23rd for his summer jaunt to the Pacific coast. He will return about September 3rd.

DR. JOHN MURPHY is spending his seventeenth consecutive summer vacation at Lake Minnetonka, Minn.

DR. JOHN S. MILLER and family are away for a month in the cool shades of Wisconsin.

DR. E. H. KEITH has been seriously ill for the past two months, but we are glad to know that he is now rapidly improving.

DR. J. H. COULTER is the happy father of a bouncing boy baby.

DR. O. B. WILL expects to spend September in the east, attending while there the various medical meetings in Washington, D. C.

THE following villainous conundrum is going the rounds: "How does the anatomy of a dog differ from other animals?" "Because his lungs are the seat of his pants." See?

DR. J. W. COYNER leaves in a few days for a six months' sojourn in Europe. The greater portion of his time will be spent among the hospitals of London.

DR. E. WEIS will spend August recuperating in several pleasant places in Maryland.

DRS. BOAL and **Hamilton** are planning a trip up Lake Michigan to the pleasant isle of Mackinaw.

THE rest of the city doctors will, so far as heard from, remain at home, keeping as cool as possible and envying those who can get away.

PERISCOPE.

THE ADMINISTRATION OF MEDICINE TO CHILDREN.—Jacobi writes as follows on this subject, in the *Archives of Pediatrics* for May, 1888: In the administration of medicine, excitement on the part of the patient must be avoided; the nervous system of infants and children loses its equilibrium very easily. Fear, pain, screaming and self-defense lead to disturbances of circulation and waste of strength. Preparations for local treatment or the administration of a drug must be made out of sight, and

the latter ought not to have an unnecessarily offensive taste. The absence of proper attention to this requirement has been one of the principal commendations of "homœopathy," whatever that may have been, the last twenty-five years. Still, the final termination of the case and the welfare of the patient are the main objects in view, and the choice between a badly-tasting medicine and a fine-looking funeral ought not to be difficult. In every case the digestive organs must be treat-

ed with proper respect; inanition is easily produced, and vomiting and diarrhoea must be avoided. The most correct indications and most appropriate medicines fail when they disturb digestion; it is useless to lose the patient while his disease is being cured.

The administration of a medicament is not always easily accomplished. Indeed, it is a difficult task sometimes, but one in which the tact or clumsiness of the attendants has ample opportunity to become manifest. For "when two do the same thing, it is by no means the same thing." Always teach a nurse that a child cannot swallow as long as the spoon is between the teeth; that it is advisable to depress the tongue a brief moment, and withdraw the spoon at once, and that now and then a momentary depression of the nose is a good adjuvant. That it is necessary to improve the taste as much as possible need not be repeated. Syrup will turn sour in warm weather, glycerine and saccharin keep; the taste of quinine is corrected by coffee (infusion or syrup), chocolate, and "elixir simplex," a tea-spoonful of which, when mixed each time before use, suffices to disguise one decigramme—one and a half grains—of sulphate of quinia. Powders must be thoroughly moistened; unless they be so, the powder adhering to the fauces is apt to produce vomiting. Capsules and wafers are out of the question, because of their sizes; pills, when gelatine-coated, or otherwise pleasant and small, are taken by many. The rectum and nose can be utilized for the purpose of administering medicines in cases of trismus, cicatrical constriction, or obstreperousness. Both of these accessories it may be necessary to resort for weeks in succession.—*Med. Science.*

THE TREATMENT OF ACUTE DYSENTERY.—J. W. McLaughlin, M. D., says in *Daniel's Texas Medical Journal*, of March: It goes without saying that

our treatment must be guided by our ideas regarding etiology, e. g., whether the disease in its origin is catarrhal, malarial or infectious regarding its type, whether sporadic, epidemic, sthenic or asthenic, and also by the condition of the patient with reference to his age, habits of life, previous history and his hygienic surrounds. For the relief of acute catarrhal dysentery, which is always sthenic in type, rely principally on salines and opium; these may be combined in such proportions and given in such vehicles as are best suited to the age, condition or fancy of the patient. As adjuncts to this treatment, I recommend hot fomentations to the bowels for the relief of torminia, and cocaine with morphine by the rectum for the relief of tensmus.

If the disease should become subacute, that is, should linger beyond its time, and especially when the vital powers become much lowered, good results may be had from simaruba officinalis with columba and opium.

In this stage, particularly if the inflammation has passed upward into the colon, or if ulceration of the bowels has occurred, much benefit can be obtained by the use of large injections. The water may be hot, warm or cold, whichever is most agreeable to the patient, and may be medicated by the addition of agents best suited to the case.

A favorite prescription which has done me excellent service is Labarraque's solution of chlorinated soda, one part to forty of water, used in sufficient quantity to fill and distend the colon throughout. To accomplish this the patient's hips should be elevated above the plane of the body so that the fluid may pass from the syringe into the bowels, and by its own gravity be carried to the ileo-coecal valve. It is claimed that it can even force this valve and enter the small bowel.

Quinine is used in the malarial cases, and the murcurial salts in the so-called

bilious ones; pulv. ipecac in large doses will also benefit these; a few doses will quickly arrest the disease and restore the patient to good health.

I have purposely used the term "so-called bilious condition," for I seriously question if derangement of the liver causes this condition, and whether mercury possesses any specific cholagogue properties.

A patient with the following symptoms presents himself for treatment: Tongue heavily coated, breath very offensive, skin muddy and sallow, complains of languor, nausea, and want of appetite; in short, he has a typical case of "biliousness." We prescribe, say, six grains of calomel with twenty grains of sugar divided into three powders, and direct that one powder be taken night and morning. The usual report will be that the first powder acted violently and caused large bilious evacuations; the second did not act so freely, and the third did not act at all. We find that his tongue has become clean, his breath is no longer offensive, his eyes and skin have cleared up, appetite returned and languor gone. I do not think that any one in the face of such evidence would deny that the calomel has done this good work; many would say that it did this by stimulating the liver. This I cannot believe. I claim that it was not the liver but the intestinal follicles that the calomel stimulated, and that it was not the calomel, but the pent-up morbid secretion that caused the catharsis.

Now it is the duty of these intestinal follicles to eliminate certain waste products from the body. When they become torpid and fail to perform this work, these products of tissue waste will accumulate in the system and give rise to the so-called bilious condition manifested in the color of the skin and eyes; the offensive breath, coated tongue, etc. Calomel acts directly—I believe almost superficially—upon

these follicles, stimulates them to duty, whilst the quantity of secretion emptied through them into the bowels is the purgative agent, for purgation is in direct proportion to the amount of secretion the bowel contains; hence, the first powder acted profusely, the second less so, and the third not at all. Ipecac acts in a similar manner; and it is in the malarial varieties of dysentery that I have seen the best results from its use.

The diet in acute dysentery should be light and unstimulating; it should consist probably of that character of food which is mostly disposed of in the upper portion of the alimentary tract and which leaves but little residue to pass over the lower bowel.—*Memphis Medical Monthly.*

CODEINE TO RELIEVE PAIN IN ABDOMINAL DISEASE.—Dr. T. Lauder Brunton says of the use of codeine to relieve pain in abdominal disease: The class of cases in which I have used it is, I think, somewhat different from those in which it has previously been recommended, because while Barbier Aran and others have chiefly employed it in gastralgia and painful disorders of the stomach, I have used it chiefly in pain affecting the intestines and lower part of the abdomen. The kinds of cases in which I have used it have been very varied. As examples I may shortly describe one or two. In one case which I saw with Dr. Eccles, there was high temperature, intense pain in the right iliac fossa, with considerable swelling, so that there could be little doubt that there was inflammation around the cæcum, although examination after the acute symptoms had subsided showed that there was also pelvic cellulitis. In this case one grain of codeine, given in the form of a pill, relieved the pain at once, and repetition of the dose whenever the pain began to return prevented its becoming at all severe.

In another case, seen with Dr. Philot, of Croydon, a lady, aged 50, had pneumonia of the right base, a greatly dilated heart with very irregular action, pulse so rapid and weak that it could hardly be counted, and pain over the epigastrium and spreading out from it. She was slight jaundiced, and a tumor was felt in the right lateral abdominal region, which descended with respiration, but was partly covered by intestine, and could be moved from side to side, so that it seemed to be renal rather than hepatic. As no *post-mortem* examination was obtained, the exact diagnosis could not be established, but the administration of codeine in half grain doses relieved the pain, as Dr. Philot said, "as if by magic."

In another case, seen with Dr. Pardington at Tunbridge Wells, there was pain in the abdomen depending upon a mass of impacted faeces in the transverse colon. In this case codeine relieved the pain, and the use of copious enemata, aided by washing out the stomach, cleared away the impacted mass which had given rise to the disturbance. I have tried codeine in cases of long-continued abdominal pain for which no definite cause could be assigned, as no tumor could be felt, and the functional disturbance did not seem sufficient to warrant a diagnosis of malignant disease. I have tried it in cancer of the liver and pancreas with success in relieving pain, and also in numerous cases where the age of the patient, the presence of diarrhoea, tenderness on pressure, and visible peristaltic movements, and thickening of the gut, easily perceptible on palpation, led to the diagnosis of malignant disease in the intestine, although inability to obtain a *post-mortem* examination prevented the confirmation of the diagnosis. In such cases I generally begin with half a grain, in the form of a pill made up with the extract of gentian, three times a day; and if this is insufficient to con-

trol the pain I increase the dose to a grain, and give it as often as seems necessary. As a rule, I find that it does not produce drowsiness, nor has it interfered with the digestive functions.

To sum up, the results I have obtained from the administration of codeine have satisfied me that it has a powerful action in allaying abdominal pain, and it can be pushed to a much greater extent than morphine without causing drowsiness or interfering with the respiration or with the action of the bowels. It is, therefore, specially indicated in such a case as Dr. Philpot's, which I have already mentioned, where the dilated heart and consolidated lung tended to make one afraid of morphine. Codeine is also specially indicated in a case like Dr. Pardington's, where one wished to relieve the pain without interfering with the action of the bowels. On the other hand, in cases where there has been much diarrhoea, as in some cases of malignant disease of the colon or rectum, the absence of any tendency to lessen peristaltic movement is rather a disadvantage to codeine as compared with morphine or opium.

I have found that in cases of long-continued enteralgia without organic disease, it has continued to relieve pain for months together, without the dose being increased beyond one grain three times a day, and I found the same to be the case where the presence of a tumor, in addition to other symptoms, had led to the diagnosis of malignant disease. It is interesting to follow the vicissitudes of a drug, and to notice how its use extends or diminishes until at last it finds its right place and maintains it. Thus digitalis, while mentioned in the London *Pharmacopœia* of 1721, was excluded from that of 1746. It again appeared in 1788, and since then it has held its place.

Possibly codeine, after falling into almost complete disuse as an analgesic

for many years may again regain a more or less important place amongst the remedies which enable us to relieve pain.—*British Medical Journal.*

A VISIT TO THE CLINIQUE OF DR. APOSTOLI, OF PARIS.—Having been making some inquiries about the treatment of perimetral hyperplasia as carried out by Dr. Apostoli, I received through Dr. Woodham Webb, of Neuilly-sur-Seine, an invitation to visit the clinique at which Dr. Apostoli carries on his gratuitous practice.

Finding myself able to spend a week in Paris I took advantage of the invitation and presented myself at No. 19 Rue de Jour. Dr. Apostoli had not arrived, but I was able to observe the mode in which the cases are recorded. The assistant comes some time before his principle, gets the histories of the new cases, and writes up notes of the old ones. The patients are not confined to the waiting room, but swarm into the examining room, so that the uterine history of any can be overheard by any one that wishes, and furthermore, during examination is under the eyes of those waiting. This, I think, would be impossible in England and Scotland, but it has this good effect, that it prevents any undue fear and nervousness by the example of others, and deprives a fussy woman of any excuse to be troublesome. Very few of the women seem to mind this unseemly publicity. I have not seen this to the same extent before in the outpatients' departments of the French hospitals, but in the Maternity side of the School of Medicine I have noticed an almost equal want of delicacy. The room was small for its purpose, about fifteen feet square, having in one corner a desk, in another (opposite the window) the gynaecological couch, whilst in the center was a large Gaiffe battery, with galvanometer, and a table on which were the necessary instruments. The instruments not in

use lay in a carbolic solution, while sublimate solutions were at hand for irrigation, for dipping the instruments into before use, and for the surgeon to wash with.

I was received most courteously by Dr. Apostoli on arrival, and found that with a Frenchman's love of his language, though understanding English very well, he preferred to use his own. This made it somewhat difficult for me to completely follow his questions to the patients, but he kindly gave the written case as each presented herself, and invited me to examine any case in which I seemed interested. I examined nearly every case, and questioned the women for myself.

Before describing the classes of cases I saw, I shall briefly sketch the mode of treatment of two cases of uterine fibroid, one recently and one for some time under treatment.

We will now suppose that an old case of fibroid is on the table. The case-book shows that she has had the galvanic puncture five or six times, and under treatment perhaps six months. The menorrhagia is quite under control, she is still blanched-looking, but bright, and says she is now able, and has been since the first month, for her usual work as a charwoman. Only the galvano caustic is to be used to-day. She is placed on her back with the thighs separated, the surgeon himself irrigates the vagina with 1-1000 sublimate solution, passes the sound, which has been burnt over a spirit lamp, then dipped in the sublimate solution, and anointed with carbolic vaseline. The clay electrode is placed over the abdomen, any abrasion of skin being covered with a piece of moistened paper, and the connection made. The current (probably negative) is gradually increased to 20, 30, 70, 150 or even 200 milliamperes, according to the former toleration of the patient and her present capability of bearing increase. The current is continued for five to eight

minutes, and is sometimes accompanied by hemorrhage, then the vagina is again irrigated, and a tampon of iodoform lint is inserted through a speculum, and the patient is sent to her seat for an hour or two. They walk or drive home, sometimes long distances, and are able for their work next day.

With our next case puncture is to be employed—the same irrigation is carried out—and Dr. Apostoli (after washing his hands carefully in the mercurial solution) makes a bimanual examination, and determines the place of his puncture, choosing the cul-de-sac or the posterior lateral aspect of the tumor, fixing his finger on the chosen spot (which must not be near any pulsating area) he passes the loose canula along his finger to the place, then having determined the depth of the puncture by the trocar's movable handle, he presses it on, making a puncture of one-third to three-quarters of an inch in depth. A shorter period and fewer milliamperes are employed, and the pain is evidently greater. In his private practice chloroform is sometimes needed. The case is then irrigated and dressed as before, and told to appear in two days. Thereafter until the slough separates, a matter of eight days, she is instructed to use the hot water sublimate irrigation (1-2000-3000) four or six times daily. This case may require one puncture a month for several months with the galvanic caustic between, but the patient, with two days' rest after the puncture, is able for all her work, and seems more than content to go on with her treatment.

For chronic endometritis and active hemorrhage the positive pole is used, and the electrode carried to all parts of the cavity, so as to act upon the entire mucous membrane. For acute endometritis, peri- and parametritis, a long previous course of irrigation with hot water is enjoined, and no operative

interference is attempted until pain to the touch is gone, or the sound can be passed almost painlessly.

For acute para- and perimetritis nothing is done while pain and tenderness remain, but when the painless or chronic stage is reached, the puncture is made into the most accessible part of the hyperplastic exudation, and the treatment carried out as before. A case like this may need ten punctures, and the galvano caustic simple has but little effect upon it.

In hydrosalpynx benefit has been found by tapping the tube, and then following it by negative puncture. The same course has been followed by Dr. Apostoli in pyosalpynx, and I examined one case in which the distended tube could be felt as hard as iron, having inspissated and shrunk under treatment. All the time the patient professed to have felt quite well instead of being as before in constant pain. Dr. Apostoli also informed me that he proposed shortly attacking ovarian tumors per vaginam, and at present has under care some cases (one of which I saw) of hydatids of the liver, for which he has invented a special needle, and instrument for its withdrawal.

For cases of ovarian neuralgia simple, with no inflammatory history, and no exudative material, he uses a Faradic current with a bipolar sound passed into the uterus. One such case presented herself, and when I examined the ovary was tender to the touch; after eight minutes of the interrupted current she expressed herself as free from pain, and the ovary could be pressed upon without objection.

Dr. Apostoli's apparatus consists of a Leclanche or bisulphate of mercury battery of thirty-six cells of a rheophore of clay for the abdomen, of sounds of platinum for the galvano caustic, of trocars of steel for the puncture, with their canulas, and of the bi-polar insulated sound for use with the interrupted coil machine. In his private house

he also provides what he calls an electric bath of strict electricity, by a large friction machine worked by an air engine. This apparatus is capable of giving a spark of six inches, and, not worked at its full strength, is used in directing the fluid to any required portion of the patient's body, being provided with suitable conductors. I saw myself, with this machine, a spark of $1\frac{1}{2}$ inches drawn from a woman's arm without the appearance of much pain, while the current formed was strong enough to make the bystanders' hair stand on end literally at a distance of one or two feet.

The distinguishing feature of Dr. Apostoli's machinery is the galvanometer by which he is enabled to measure the strength of his constant current up to 200-300 milliamperes, and the strong point of his conduct of a case is his strict attention to antiseptic details. In no case did I notice the smallest departure from the rules he has laid down for the strictest antiseptic cleanliness of his instruments and hands, a cleanliness which he insisted upon also in his visitors.

Having been enabled to make any inquiries I wished, I have no hesitation in affirming my belief in the genuineness of the cases put before me, my only fear being, that, encouraged by his success in the past, he may be inclined to venture on classes of disease (such as ovarian cysts) in which we cannot so easily see reason for hope of success. In conclusion, I have to record my obligations to Dr. Woodham Webb for his introduction, and to Dr. Apostoli for the kindness with which he opened his clinique to me, and gave me all the information which my knowledge of the language enabled me to absorb.—*Medical Press.*

"IS THE MULTIPLICITY OF MEDICAL JOURNALS A BENEFIT TO THE PROFESSION?" — This is the question that should have had precedence at the

late meeting of medical editors in Cincinnati, but was rolled aside. It is, nevertheless, one not only of interest to medical editors, but to the profession at large as well. In view of this fact we will indulge in a few thoughts forced upon us in contemplating the discussion.

There are certain general functions of journalism, limited in character, but universally regarded as essential to the progress and prosperity of the profession. Of these may be mentioned, recording the advances made in the various branches of the profession, especially in the central parts of the country, where hospital facilities are abundant and intellectual friction a constant source of stimulation. With those who have had any considerable experience, either in an editorial capacity or otherwise, with well established medical periodicals in educational centres, the value of such to the profession is a matter of daily observation. The medical literature constantly being involved by men of well-known ability, supplies such periodicals with pabulum of known acceptability and benefit to the profession. These functions belong to all journals alike; the metropolitan weekly, the less pretentious weekly and the ever favored monthly. And it may be said if these duties alone belonged to journalism it would be preferable to have but a limited number.

But there are other functions that belong to the well-conducted medical periodical, special offices, of little less importance than the general functions, but obligations that can be discharged only over a limited territory in proximity to the sight of publication, regardless of the immensity of the circulation. Journals of wide circulation exercise a general influence, and perform well, it may be, the general functions, but fail to develop any local enthusiasm, pride or interest in local matters—which we may denominate special functions—save in the immediate neighborhood in

which they are published. In the elevation and stimulation of the profession it is this local prompting—the doing of the special duties, offices of personal and proximate character—that evolves the great good. Of what benefit is it to the profession of a given locality to know that abdominal surgery is done by Spencer Wells in London, Lawson Tait in Birmingham, or Thos. Keith in Edinburg, with unparalleled success, if they of the same are not stimulated to efforts of a similar character? This stimulous is often solely the pride and glory of repute, and the latter is most keenly felt and appreciated among acquaintances and friends at home. It is this local influence, aroused by the journal published in the immediate neighborhood, in which all feel a personal interest, that encourages application and arouses ambition. It is the local stimulus of local pride that induces careful bedside records, and the ultimate publication of such experience, in "our" journal. It is in the performance of these special functions that the journal attains the positive in the region about its place of publication, to encourage organization. Men give their experience to a journal published near their homes that would never think of writing for one published at a distance. The social sentiment, too, of this local influence is not to be ignored. Physicians would often remain strangers to each other for life, when living, perhaps in the same city or but a few miles from each other, were it not for the medical monthly or weekly published at their doors. The collective study of diseases in a given locality, is better prosecuted in connection with a journal published in the neighborhood of that locality than one published elsewhere.

Last, but by no means least, pharmacists reach the readers of the journals published in the vicinity of the latter's residences, when it would be impossible to reach them in a periodical

published elsewhere. And who does not realize the importance of familiarity with the advertising pages of the medical journals of the present day? Who that does not consider himself blessed in being able to get out of the old rut of roots, herbs and teas of former times, and in lieu thereof substitute the beautiful products of the laboratory of the present day?

Each locality needs a medical journal for the above home purposes, and for the performance of the general functions of medical journalism as well. Each locality will build up its profession *pari passu* with the support its doctors give the home publication, and the pride they develop in its maintenance.

—*Memphis Medical Monthly.*

RECTAL INSUFFLATION OF HYDROGEN GAS.—Dr. N. Senn, in concluding a most thoroughly scientific article upon this topic in the *Journal of the American Medical Association*, says: "I beg leave to submit for your discussion the following propositions:

" 1. The entire alimentary canal is permeable to rectal insufflation of air or gas.

" 2. Inflation of the entire alimentary canal downward through a stomach tube seldom succeeds, and should, therefore, only be resorted to in demonstrating the presence of a perforation or wound in the stomach, and for locating other lesions in the organ or its immediate vicinity.

" 3. The ileocæcal valve is rendered incompetent and permeable by rectal insufflation of air or gas under a pressure varying from one-fourth of a pound to two pounds.

" 4. Air or gas can be forced the whole alimentary canal from anus to mouth, under a pressure varying from one-third of a pound to two pounds and a half.

" 5. Rectal insufflation of air or gas, to be both safe and effective, must

be done very slowly and without interruptions.

" 6. The safest and most effective rectal insufflator is a rubber balloon large enough to hold sixteen litres of air or gas.

" 7. Hydrogen gas should be preferred to atmospheric air or other gases, for purposes of inflation, in all cases where this procedure is indicated.

" 8. The resisting power of the intestinal wall is nearly the same throughout the entire length of the canal, and in normal condition yields to diastolic force of from eight to twelve pounds of pressure. When rupture takes place, it either occurs as a longitudinal laceration of the peritoneum on the convex surface of the bowel, or as a multiple ruptures from within outward at the mesenteric attachment. The former result follows rapid, and the latter slow, inflation.

" 9. Hydrogen gas is devoid of toxic properties, non-irritating when brought in contact with living tissues, and is rapidly absorbed from the connective tissue spaces and all of the large serous cavities.

" 10. The escape of air or gas through the ileocæcal valve from below upward is always attended by a blowing or gurgling sound, heard most distinctly over the ileocæcal region and by a sudden diminution of pressure.

" 11. The incompetency of the ileocæcal valve is caused by a lateral and longitudinal distention of the cæcum, which mechanically separates the margins of the valve.

" In gunshot or punctured wounds of the gastro-intestinal canal, insufflation of hydrogen gas enables the surgeon to demonstrate positively the existence of the visceral injury without incurring the risks and medico-legal responsibilities incident to an exploratory laparotomy."—*Med. Register.*

THE TREATMENT OF INFANTILE CONSTIPATION.—In cases where the

passages are dry and hard, cascara has failed most signally, and that, too, after a most patient and thorough trial of the drug. In these cases, where there is a deficiency in the intestinal juices, I can most heartily commend to the consideration of the profession the use of small doses of podophyllin. For a babe from nine months to a year old, I would prescribe the following, to be used for at least two weeks, and longer if found necessary:

Resina podophyl	2 grains
Sacch. lact	$\frac{1}{2}$ drachm
M. et ft. chart. No. xxxii.	

Sig: One at night in a little milk.

Of course the proper dose can only be determined by trial. My aim is to produce a soft and easy discharge every day. And right here let me insist on the importance of appointing a regular time to have the bowels moved. Nothing should turn the nurse aside from attention to this important duty. It is truly remarkable at what an early age an infant can be taught what it means to be placed on his little chair. I have often known mothers to commence to educate their babies in this direction as early as the fourth month.

—*Kansas City Medical Index.*

TAPEWORMS.—Gerhard has used Schafli's remedy for tapeworm in every case with complete success:

R. Granati cortici radicis	$\frac{1}{2}$ ounce
Seminorum peponis	1 ounce
Pulveris ergotae	1 drachm
Aquæ bullientis	8 ounces
Fiat infusion.	
R. Extracti filicis maris ætherici	1 drachm
Olei tiglii	2 minimi
Pulveris acaciæ	2 drachms
Fiat emulsio.	

Mix the emulsion with the infusion for one dose, to be given at 10 o'clock in the morning, having eaten no breakfast, and having taken a full dose of Rochelle-salts the previous evening.

In every instances but one the parasite was expelled alive, in about two hours after taking the medicine. One singular peculiarity is that the worm is nearly always voided entire, with its head fastened to the side of

its own body, which very much facilitates the finding of that very important portion of the animal. — *Philadelphia Medical Times.*

THE ETHICS OF THE MEDICAL PROFESSION.—“Usually the clergy do not comprehend the ethics of the medical profession better than the laity. Generally the publication of religious as well as secular journals approve of the quack and condemn the honest, regular practitioner. Of the golden rule, as applied to medical men in their professional work, the clergy are, as a rule, utterly ignorant. But a writer in the *Washington Christian Advocate*, while discussing ‘Ministerial Quackery,’ makes the following remarks about the medical profession. It will be the more appreciated because of its rarity. It is the first ray of that rising sun which shall one day illuminate the entire world respecting the ethics of medical men.”

“It is a noteworthy fact that the medical profession has, more perfectly than any other, maintained its high and pure standard of excellency, and all the time made steady and substantial progress. There is something significant in this when we remember that this profession has kept its face against all forms of quackery. It recognizes as a great truth that the interests of humanity demand that a physician and his work should be estimated solely by their real worth. The man who advertises his excellencies, or has himself thus advertised, is suspected at once of being shallow, if not fraudulent, and being conscious of his deficiencies and his inability to pass on his real merit, he resorts to the newspaper as a means to catch patronage from the light heads and the unthinking. The code of ethics of this profession is steadily against all humbuggery, and we note with pleasure that meekness and modesty have not yet been retired from the code. We readily see that a man in

this profession is thus kept upon the high plane where his eye is ever fixed upon an ideal that is pure and elevated, and worthy of a man.”—*Amer. Lancet.*

IPECACUANHA IN DISEASES OF THE THROAT AND RESPIRATORY ORGANS.

—Dr. William Murrell, in concluding a clinical report of cases treated with ipecacuanha spray (*Medical Press and Circular*, April 25, 1888) says that most successful results are obtained from the employment of the ipecacuanha spray in cases of chronic bronchitis and bronchial catarrh. In fibroid phthisis there is often a marked improvement, even when no constitutional treatment is adopted. A single inhalation will sometimes restore the voice in cases of hoarseness due to congestion of the vocal cords. It is a matter of little importance whether the spray be given with a hand-ball spray apparatus or with a small steam vaporizer. In either case the spray must be warm and the patient should not go out for some minutes after inhaling. Care should be taken to see that the spray really enters the lungs and is not stopped by the arching of the tongue against the wall of the mouth. The best results are obtained by using the spray for about ten minutes three or four times a day. In the majority of cases of winter cough relief will be obtained in ten days.

TUBERCULOUS MENINGITIS.—In a paper in the *Journal de Medecine*, October 16, 1887, Oxley gives the following as his conclusions:

1. Tuberculous meningitis is not a disease *per se*; but since the effusion into the ventricles, if abundant, causes a fatal result, this phase of tuberculosis deserves close study.

2. The effusion into the ventricles is the consequence of occlusion of the vessels by the development of tuberculous nodules in their walls.

3. The disease seldom occurs after the tenth year.

4. Prophylaxis is all-important. Every change in the condition of a child should be noted, and the state of the pulse and temperature should be carefully watched.

5. Tubercular meningitis is not caused by over-exertion of the brain. Confinement in a poorly-ventilated room or everuse of the brain may lead to nervous exhaustion, and the result of this, in a child with phthisical tendency, may be tuberculosis, but not necessarily a fatal tuberculous meningitis. As many children under the age of ten years, who are also too young to go to school, die from this disease as die from the numbers of those attending school.

The microscopical investigation of these cases shows that, in the tuberculous conditions of the brain, the point of departure for the accomplishment of infection is a cheesy mass, the infectious matter being probably carried by the vessels.—*Archives of Pediatrics.*

LOCAL APPLICATIONS OF CARBOLIC ACID IN CARBUNCLES.—Dr. James McManus of Brooklyn says: "While assistant physician at the hospital for incurables (Insane Asylum), Flatbush, L. I., in the winter of 1882-83, I was called by one of the nurses to see a patient in the female wards. I found her with a large carbuncle on her left thigh. The patient had probably been suffering with it for several days before my attention was drawn to it; and when examined the carbuncle had a very unhealthy appearance, and the patient was to all appearances very sick—so sick that I fully expected her death. I had been preparing carbolic acid solutions in the drug-room that morning, and scarcely knowing what to do—believing as I did, that nothing I could do was of any use—I sent what I thought was a five per cent. solution of carbolic acid to be used as a wash,

On visiting her again in the evening I was surprised to find my insane patient very much better in appearance, and was still more so to see that the carbuncular swelling had decreased to one-third its former size, and in place of the almost gangrenous appearance of the morning, had assumed a vastly more healthy appearance. I had given ten-minim doses of tr. ferri chlor., but as she had only taken two doses of that, I could not attribute the changed appearance to the action of the drug. On examining the wash, I found that by mistake I had given a fifty per cent. solution of the carbolic acid, which the nurse had faithfully applied by wetting a cloth in it and placing it over the carbuncular swelling. I kept the fifty per cent. solution on the patient that night, but substituted a weaker one the next day. In a few days the patient was entirely well. I have always believed that that mistake of mine saved the miserable, incurably insane patient's life."—*Medical Record.*

THE TREATMENT OF INCONTINENCE OF URINE WITH RHUS AROMATICUS.—Rhus belongs to the family of terebinthines, and possesses marked astringent properties. Up to the present *Rhus aromaticus* has been cultivated simply for ornamentation, but recently its use has been introduced into medicine by some American physician, whose name has escaped, for the astringent properties of its bark. In the *Journal de Medecine*, May 13, 1888, MM. Max and Burvenich have reported a number of experiments made with this drug, and have employed it with successful results in the treatment of incontinence of urine. Max made use of a tincture prepared by maceration of 200 parts of the drug in 1,000 parts of alcohol at 80°. According to the age of the patient he gives daily doses of from twenty to fifty drops of this tincture, and has found that it has always been well supported. Out of

eleven cases which he reports, nine more or less decisive successes are to be found. Burvenich, out of thirty-three cases, has obtained an excellent result in eleven, fairly satisfactory in ten, and but little marked in twelve. In those cases in which the good effects were produced these results appeared after five or six days' treatment, although in some cases it was necessary to wait for a month before any effect was evident. As to the mode of action of this remedy, the authors state that it produces no sensation or apprangible phenomenon, as seen in experimenting upon themselves; but since in one of their cases, that of a man 79 years of age, suffering from incomplete paralysis of the bladder, without stricture or hypertrophy of the prostate, tincture of rhus greatly facilitated the capability of power of micturition, and the authors believe that it acts as a tonic on the walls of the bladder. — *Ther. Gazette.*

THE SALICYLATE OF MERCURY.—The salicylate of mercury is a white, amorphous powder, free from odor, and slightly acid to test-paper. It is slightly soluble in water and alcohol, and contains .02 per cent. of water of crystallization and 59 per cent. of mercury.

Dr. Henry T. Inge reports in the *Atlanta Medical and Surgical Journal* for June, 1888, a number of cases of syphilis treated by this preparation, but it does not appear to be as favorable in its actions in general as the bichloride.

The dose given internally may range from $\frac{1}{16}$ grain up to 4 or 5 grains a day. The advantage of the salicylate over the bichloride may be summed up, according to the author, as follows:

1. It is supported easily by the stomach without bad effects.
2. It has decided curative effects on mucous patches and syphiloderms when used externally.

3. It does not produce mercurial ptalism.

4. It is of great advantage in the treatment of a parasitic disease.

5. It is effective when the bichloride has no effect.—*Therapeutic Gazette.*

A FORMULA FOR CATARRH OF THE THROAT.—Dr. Endler, in the *Deutsche Med. Wochensch.*, February 22, 1888, highly recommends the following gargle in cases of catarrh of the pharynx or larynx. It is by no means unpleasant to the patient, and its use accompanied by very satisfactory results:

R. Sulph. zinc.	75 grains
Aqu. menth. piper.	2 pints
S. Use as gargle three or four times daily.	

DRUG STORES IN DRESDEN.—The drug stores have a curious way here of shutting up just about the time you want them. And as soon as it begins to grow dark, down go the shutters; and if you need anything, you go to a little bell-handle outside of one of the iron shutters, and ring it. Then you hear some one at a crank inside; the massive frame rolls up, and a head looks out of the window. Finally the man or boy inside opens part of the window, and you talk through a pane of glass, and make known your wants. Instead of getting angry at being aroused, the man begs your pardon for keeping you outside, and says: "I thank you for your order." If you have not the exact change, and the man inside is in the same predicament, he will beg you most politely, and thank you, to allow him to change it. Having done so, he will thank you for calling (evidently taking the visit as a social one), bow, close his little peephole, bow again, and then smile sweetly as he grinds down his iron shutter, and his smiling face is lost to view. How different from the druggists in America! I remember I once woke one up in the States, and he came down stairs with

a shot-gun after me. But, as I remarked before, they have a curious way of doing things in Dresden.—*Exchange.*

A "COUNTRY PRACTITIONER" writes to the *Maryland Med. Journal*, June 9th, 1888, asking advice as to what instruments he should carry with him in his daily rounds. He began practice with a small pair of pill-bags and a lancet, but as he purchased every new instrument whose merits were endorsed by his medical journal, he now takes with him, in addition to his medicine chest, a stethoscope, obstetric forceps, tooth extracting instruments, syringes—sizes adapted to adults and children—a magnetic machine, patent cupping apparatus, case of surgical instruments, speculum, pessaries—assorted sizes—and a vaginal syringe. He thinks of adding to this varied collection three thermometers, for the armpit, anus, and vagina respectively; and the editor thinks he should take with him a gynaecological chair and an operating table.

ACCORDING to the *Med. Record*, May 26th, 1888, an Italian patient in one of Dr. Shrady's wards in St. Francis Hospital, deliberately chewed a fever thermometer and swallowed the greater part of it before he was made to understand that the instrument was not intended as a medicine. The editor thinks it was lucky he had no subsequent increase of temperature, which would make it necessary to risk another thermometer in that way. But then how could the temperature rise when the thermometer went down?

THE VARIOUS REMEDIES FOR BRAIN AFFECTIONS.—The uses of certain medicaments first became classic and ended by becoming commonplace. Bromide of potassium, as used in maladies of the brain and its appendages, is one of these. Iodized and phosphorized

preparations, though less popular than those which have bromine for a base, are yet in common use in analogous cases. If, however, it is well understood these medicaments may be useful in combatting brain maladies, the knowledge of the precise circumstances under which they should be prescribed is not so perfectly known.

The bromides act in combating the condition of congestion and as calmatives. The iodides are stimulants; they act upon the lymphatic system and promote absorption.

The phosphurets are also stimulants, having a special application to the substance of the nerve cells, and giving out phosphorus to the tissues.

This being understood, if we wish to combat idiopathic cerebral hyperæmia, we would use the bromides. Also, if it be a case of encephalitis, or meningitis with congestive phenomena, we would use the same means. After the acute phenomena have subsided, the iodides should take their turn as medicaments which favor resorption.

When should we give phosphorus, or rather its salts? Take, for example, a case of cerebral hemorrhage; action returns slowly to the paralyzed limbs, the intelligence has not been fully recovered since the attack, ordinary tonics and good alimentation have failed to establish the equilibrium; we should then make tentative use of the phosphuret of zinc. Without entering into an analysis of the indications, we may say generally, that for the phenomena of irritation we should use the bromides; for compression the iodides; and for adanamia and slow reparative process, the phosphurets. These often correspond to the three stages of pathological evolution in which the bromides are indicated at the commencement, the iodides in the middle period and phosphorus in the final stage.—*College and Clinical Record.*

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ORIGINAL COMMUNICATIONS.

SIX HUNDRED CASES OF ACCIDENT SURGERY AND THE ANTISEPTIC TREATMENT.

BY ROMAINE J. CURTIS, M. D., JOLIET, ILLINOIS,

Surgeon in charge of St. Joseph's Hospital.

These six hundred cases of surgery, the result of accidental injuries occurred in my practice within two years, and were all treated by antiseptic methods.

The majority were injured by accidents in quarries, wire mills, the steel company's works, and railroads. The remainder were injured by dynamite, shot-guns, pistols, base-balls, brawls, runaways, falls and dog bites.

Out of the six hundred cases there were ten requiring amputation of thigh, twenty requiring amputation of leg, forty-two requiring amputation of part of the foot. These injuries involved bones, soft parts, blood vessels and veins—in short, the parts were crushed.

There were fifteen amputations of arm, twenty-three of forearm and thirty-eight of one or more fingers or part of hand.

There were eighteen fractures of femur, three of which were compound.

There were forty-two fractures of leg and bones of feet, eleven of which were compound and comminuted; two resections of humerus at middle third were made, and eight resections of bones of forearm, primary and secondary, were made.

The remainder of the injuries include fractured ribs, dislocations, three hip joint, four elbow joint, six calcaneum, two shoulder.

The balance were burns, lacerations, cuts and contusions of greater and lesser magnitude, and injuries of joints, strains, etc.

The resections of humerus were primary operations, the others secondary from bone invasion or necrosis. The amputations were all primary, except three of the leg.

Out of the whole six hundred but two deaths occurred after survival of the shock, hemorrhage or operation; one from septicæmia, after amputation of thumb, and one from hemorrhage and amputation of thigh, high up, in a person over 60 years of age.

The septicæmia following amputation of the thumb was due to auto-infection.

The injured man, aged about 35 years, was a heavy beer drinker. His thumb was crushed by car-couplers. Amputation, by antiseptic methods, was performed within an hour after injury, and dressing applied. On the third day patient spoke of lameness

and swelling of right lower extremity, chills, pains generally, and temperature was found to be 105 degrees. The dressing was removed, and showed union progressing by first intention without lymphangitis or other inflammation of hand or arm. Diagnosis made of embolism of vessels of lower extremity. All the light admissible on the case was that the well water used by the patient was polluted by sewage. The man died seven days after the amputation.

THE ANTISEPTIC METHOD.

The object of antiseptic treatment is to prevent the entrance of pathogenic organisms from the air or instruments or other materials into wounds, and also to prevent the patient from swallowing the same infection in water or food. The antiseptic method is confessedly a method of prevention rather than cure, and to such an extreme has this method developed that when a case of blood poisoning occurs, following a wound, the inquiry always is to learn, if possible, what fault exists in the method of prevention.

The indication is very clear that to prevent auto-infection, the water and food and air supply must be as free from disease poison as possible. The method of prevention relating to the infection of the wound is complicated, and relates: (1) To mechanical means, which prevent the entrance of pathogenic organism; and, (2) To chemical means which prevent the germination of the spores of organisms, and which may also poison the organisms.

Investigation shows that the wound may be inoculated by the surgeon's hands, by his instruments, by water

used in cleaning the wound, by soap and sponges, by the dressings applied, and by the air.

These facts rather lead us the opinion that a large amount of the blood poisoning in the clinical history of surgery was caused by neglect of the antiseptic method or by inoculation.

The question for the surgeon, then, is, how to prepare himself, his instruments and dressings to comply with the antiseptic method?

Many writers on this method are contented to advocate "cleanliness," and define their meaning by referring to soap and water. Of course cleanliness of this general kind is eminently religious and socially respectable, but it may have no bearing on the antiseptic method, which demands that the surgeon must be specifically clean. The surgeon may be clean relating to dirt, but may be worse medicine to his patient than a dynamiter, owing to the fact that he may be the vehicle of contagion.

The surgeon who has visited a case of contagious disease—erysipelas, septicæmia, puerperal fever, etc.—is not, without further preparation than soap and water, specifically clean enough to perform a surgical operation or dress a fresh wound. The facts which are already developed relating to the transportation of contagion make the subject of prevention by the surgeon bristle with difficulties and discouragements. No certain rules can be given, but while a science is in course of development, all experience is worth considering, and I, therefore, feel excused for making a contribution, based on my experience.

After the surgeon has made himself specifically clean—aseptic—the question relates to his treatment of the wound by instruments and dressings. Formerly surgical instruments were kept clean, in beautiful cases lined with velvet. They were duly washed, oiled and put up, after using, in velvet notches. The object was to prevent rust. Not so now. Instruments are tumbled together promiscuously; often they are rusty. They are blackened and dulled by carbolic acid. My own instruments are carried in a towel. The elaborate pocket case, costly, silk lined, so beautifully covered in leather, so elaborately divided into compartments and pockets, has gone to rest, and its place is taken by a metal box, which has but one compartment. Needles are carried in a metal match-box. The silk ligature is carried in a glass bottle, having a cork and screw metal cap. The bottle contains a glass spool for the silk, and is filled with a five per cent. solution of carbolic acid. The end of the silk is pulled out through the cork, cut off and the suture or ligature is ready without removing the cork or spool. Cat-gut and silver sutures are prepared in much the same manner. My surgical case contains gauze, sublimated, a solution of carbolic acid, and of corrosive sublimate, compho-phenique, cotton, plaster and ointment, or salve, bandages and drainage tubes. Buying gauze is expensive. So, I buy a bolt of cheese-cloth, boil it six hours and rinse in boiled water. The gauze is cut into yard strips, rolled and packed in a stone jar in a one to ten thousand (or

more) solution of sublimate. It is carried in a metal box. Rubber tubing is not very expensive. I carry a yard or two in a wide-mouth bottle filled with a ten per cent. solution of carbolic acid. The ointment is, carbolic acid, two grains; iodoform, one-half drachm; cosmolin, one ounce. In addition, a bottle of iodoform can generally be smelled, by a novice, in my surgical satchel. If not used for iodoform, the bottle would probably be doing service for some family as a pepper-box.

ANTISEPTIC TREATMENT OF A WOUND.

Before an operation or dressing a wound, the skin is cleansed by a solution of sublimate, and shaven. As a rule, brushes or sponges are not used. A brush is as bad as a sponge. A role of gauze must do this work. In dressing the wound the next step is irrigation. Nothing equals a syringe for this purpose, and sublimate solution, 1 to 5,000, cannot be excelled by anything yet known as an irrigating fluid.

The only rule needing particular attention relating to drainage is that it should always be used when possible, and so arranged as to do the work. The tubes, or drainage of whatever kind, should be large enough and numerous enough to insure that the drainage is accomplished.

The subsequent dressing is gauze, cotton covered by gauze, or gauze carrying the salve, which materials cover the wound, with as much adjacent anatomy as desirable, including the drainage apparatus. As a rule, the first dressing will remain three or four days.

THE RESULTS OF THE ANTISEPTIC METHOD.

The antiseptic method does not always prevent the invasion of pathogenic organisms and the development of surgical fevers. No one can successfully deny that it operates in the direction of a preventative, and often prevents. I mean by antiseptic method, the measures taken to prevent auto-infection as well as mediate infection of the wound. In addition to the case given as one of auto-infection, I have had six cases of infection and surgical fever which occurred in the wound in spite of the dressings and all preventatives. I do not include pus formation in this list, though I have no doubt that pus is due to infection, and that an aseptic wound heals without pus.

The greater number of my amputations, burns, lacerations, compound fractures and cuts, heal without pus. When I see pus I attribute it to carelessness or accident, and an effort is at once made to prevent further pus formation.

The six cases of blood poisoning were in: (1.) Resection of humerus. (2.) Compound fracture of leg. (3.) In wounds of the hand.

There was one case of surgical delirium occurring on the second day after amputation of the arm with extensive crushing of the thigh by car wheels. The other cases were septicæmia and erysipelas, with recovery. In one resection of the humerus the drainage tube was left protruding through the dressings and exposed to the air by the ignorance of the attending physician. The other cases were attributable

to neglect or carelessness or mistakes in the use of the dressings.

Out of the six hundred cases there were fifty-three cases of blood poisoning due to slight but neglected wounds. There was one notable case of hospital gangrene which removed the outer surface of the leg, skin and muscles, and extended subcutaneously to the middle of the thigh. This work was all done in three days, and the origin was a scratch on the heel of a workman, who paid no attention to so small a matter. The disease was controlled in twenty-four hours after removal to the hospital, the dead parts were removed and in six months, with skin-grafting, the patient was discharged. The agent of cure was corrosive sublimate, 1 to 5,000.

The remaining cases of blood poisoning were abscess, pyemia, osteo-myelitis, tubercular invasion, septicæmia, inflammations, local gangrenes, etc.

TREATMENT OF BLOOD POISONING.

I suppose blood poisoning is caused by the poison — leucomaines, secreted by pathogenic organisms—just as is the case with all other zymotic disease. The treatment, I have always considered, should be on the same general principles in each general condition. The first sign usually seen in any invasion of a wound is lymphangitis, or skin inflammation, and there will be pain and increased temperature. The indications are to destroy the invading army in the wound and to antagonize the symptoms. The wound must be cleaned out—at least I always clean out the wound—taking out sutures if required, open any abscess and establish

free drainage, and thoroughly irrigate the wound with sublimate solution, 1 to 2,000, when the wound is again dressed as usual. No one can avoid the thought that the blood should be saturated as much as possible with an antiseptic drug. Now, I have tried phenol, solicylate of soda and many other drugs. While it undoubtedly is true that different pathogenic organisms may be poisoned by correspondingly different poisons, I have found that no remedy will cover all cases equal to calomel and opium. Of late I have made but little trial of any other remedy, except, of course, alcohol. My rule is to prescribe calomel, opium and antipyrin in cases of the poisoning of wounds, and under this treatment all cases that I have encountered, except those mentioned, have recovered.

The great difficulty in the way of estimating the value of the antiseptic method in surgery depends upon the well known facts, which some one or other will always be discovering, that people who are wounded generally recover without blood-poisoning, without antisepsis, and with only ordinary cleanliness. The truth is, that wounds heal without any cleanliness just the same; and the further truth is, that wounds heal just the same even if they are positively filthy. I don't know but the same result would follow, in a certain proportion, if wounds were systematically inoculated with pathogenic organisms.

Statistics prove that filthy wounds show poorer results than clean ones, and that wounds kept aseptic show better results than simply "clean" ones. It is incumbent for us to answer the questions: Why will a certain proportion of wounds not become infected when continually exposed? and why does the antiseptic method show the best results?

There is no method of answering these questions except from the basis of an acquired resistance to poisons, including the hereditary transmission of the acquired resistance. The law of natural selection, or its factors, discovered by Chas. Darwin, gives us all the explanation that is necessary and that is possible in the solution of these questions.

Now, if there were any means of discovering just how much acquired resistance to pathogenic poisons any given patient might possess, the question of the antiseptic method relating to the given case could be settled. If a man were known to be as well protected against septicaemia, pyemia, erysipelas and hospital gangrene, as a man is protected against small-pox who has had that disease, then the surgeon would waste no gauze or iodoform on him. His wound could be left to nature, or to soap and water.

But there are no means of knowing these things; hence the most rigid antisepsis is demanded in all surgery, especially in cases of accidental injury.

A CASE OF LABOR.

BY GEO. A. WELLS, M. D., GALVA, ILL.

October 21, 1887, I was called by a midwife to help her in a case which she could not understand. She told me she had found a tumor on the left side of the abdomen which hindered labor. She also said that the woman had been very large during pregnancy, and that when the water broke there was such a large quantity that the bed and floor were flooded.

On careful examination, the tumor proved to be a collection of fluid in the cellular tissue of the left side of the abdomen, by which the uterus was crowded over to the left side in such shape that the contractions of the organ were nearly useless as an expelling force.

On making a vaginal examination the occiput was found to be protruding naturally, but the bony walls were extremely soft. The woman was not a

very robust subject, and was becoming exhausted, so I at once applied the forceps, and in spite of the enormous size of the head, secured a speedy delivery. The body of the foetus was small, but perfect, and the head enormous, measuring ten inches in its occipito-mental diameter. The cord was very short, measuring eleven inches, and the placenta was about as large when spread out as an ordinary tea saucer.

The patient made a short but perfect recovery.

This was a very interesting case to me, and I report it because of its rarity. The patient was very thin, so the pressure of fluid on the left side and the absence of it on the right were very distinct, and the abdominal walls on the right side were very tightly drawn by the over-distended uterus.

ATROPIA IN OPIUM POISONING—REPORT OF CASES.

BY EDWIN L. SESSIONS, M. D., HILLSBORO, TEXAS.

Though it has been some time since the cases related herein occurred, still I thought they might prove interesting, and aid in strengthening someone's faith in the antidotal properties of atropia in "morphine" poisoning.

Case I.—At 11 p. m. was called to see Gus. B. (young white man), who had been drinking quite freely for some time, and it seems had determined to terminate "life's fitful fever" by the "morphine route." The friends of his spree said he put a white powder in a

drink of whisky, which they "took to be quinine;" drank the whisky and said, "I am going, boys—that was ten grains of morphine." The friends paid no attention to it until the man fell, and with sterterous breathing and total unconsciousness, limp as a rag, they said they then knew he had taken poison. When I arrived I found my old friend, Dr. Long, with the patient, trying to arouse him, endeavoring to force strong coffee down his throat, but Gus. was so narcotized that it was impossible to get

him to move; he was nearly gone. I had only a stomach-tube. With this and a common syringe we succeeded in washing his stomach out thoroughly, but with flagellation and coffee no impression was made, and the respirations were getting slower and less frequent, when, with Dr. L's consent, I injected a guessed-at one-eighth of a grain of atropia. I say guessed-at dose, for I had no way to weigh it, and only had the atropia in bulk, and was not familiar with the size of a dose; but it was all right, for in a short time Gus. was cursing and damning the doctors, and wanted to walk—in fact, the very reverse of his former condition took place; pupils, instead of pin-heads, were wide open; skin, instead of pale, was hot and red (belladonna rash). In spite of this improvement, however, in a short time the opium seemed to be again getting the mastery. Another atropia injection "fixed it." But poor Gus. suffered from the effects of atropia all the next day—in fact for several days; there were red blotches on the skin, and a peculiar irritable condition of the nervous system. Recovery complete, however, to only enable him to go on another spree, get in a dispute with a friend, and the said friend finally shooting him to death.

Case II.—A man came in saying: For God's sake, come quick to my house (four miles away), brother (age twenty-five), and sister (age fifteen), have taken morphine in mistake for cinchonidia. This mistake took place at sundown, and was discovered fortunately, in a short time after. The bottle of morphine and cinchonidia had both been obtained from town that day,

both were the same size and wrapped in blue paper. The wrappers were not taken off the bottles; only the cork removed, and the morphine (supposed cinchonidia) poured in the hand; thence placed in the spoon, and, with water, swallowed. The young man took, he thinks, about a level teaspoonful; the girl say one-half teaspoonful. Both had chills. Soon after the young man, who had gone outside, felt a peculiar languor stealing over him, and told his people to see if he had taken the right medicine. Examination of the bottles revealed the morphine open, the cinchonidia tightly corked. The girl was sound asleep at this time. Instantly the family spread the alarm and did all they could to keep life in the brother and sister. It was midnight before I got there. The young woman was apparently past help, but I gave her, as quick as possible, a dose of atropia— $\frac{1}{8}$ th or $\frac{1}{10}$ th of a grain—with the satisfaction of seeing an immediate response, as she got up, with assistance, and walked and answered questions in a drowsy way. The young man I gave more of the solution than his sister, with an immediate good effect; but it seemed to be more transient, as I soon had to repeat in his case, while in the girl's it was three hours before I deemed it best to repeat the atropia. In the case of the man, the second dose entirely relieved him, he being then able to tell us all about his feelings, etc., and by daylight was apparently as well as if nothing had happened. Not so with his sister, however, for she would walk in spite of all we could do. If you took her arm and sat her down, as soon as you released her she would get

up and go. Vision was imperfect. She would stumble over or out of the door, if not watched constantly; the skin was blotched, etc., in fact, the susceptibility to the atropia or the smaller quantity

of morphia taken by her, rendered her for a time poisoned by the counter drug. Both, however, in a few days were entirely well.

SIX CASES OF OLD DISLOCATION OF THE HEAD OF THE HUMERUS.*

BY ALBERT B. STRONG, A. M., M. D.

Surgeon to Cook County Hospital.

Case I.—O. R. C., 54 years of age, a short, thick-set, flabby-looking man, and greatly dissipated, was admitted to Cook County Hospital May 11, 1873. He was assigned to the service of the late Dr. Freer, and came under the care of the writer as surgical dresser. Three months prior to his admittance he entered upon a periodical spree, which terminated three weeks later in delirium tremens and the bridewell. A short time before going there, however, he received a sub-glenoid dislocation of the head of the left humerus. An attempt was made to reduce the deformity a few days before he was sent to the hospital, but without success.

The patient was placed under ether and the adhesions thoroughly broken up. Manipulation failing to replace the head, the method of placing the stockinged heel in the axilla with a sheet across the shoulder of the writer, which was attached to the patient's arm by a wet bandage, was resorted to. On the fourth attempt a deluge of blood gushed from the axilla, through a rent in the integument, which was large enough to contain an adult fist. Sponges were at once crowded in and all hemorrhage controlled. In a few moments

these were removed with the intention of ligating the bleeding points. None being found, the wound was again packed with sponges soaked in perchloride of iron solution. The head of the humerus was still in its abnormal position, apparently unchanged by our efforts.

The next day's record reads as follows: Arm swollen, cold and blue, no pulsation at wrist, no sensation in hand, wound dry and gangrenous, very offensive. Emphysema of cellular tissues about the arm and shoulder. Blebs forming on arm, vomiting almost constant. Death thirty-six hours after operation. Post mortem was held thirty-five hours later. "Body enormously bloated, decomposition unusually rapid." The axillary artery and vein were both found ruptured. Neither were torn completely across; a clot of blood existed in the proximal end of the artery. The capsular ligament was found very much thickened and at points ossified. New bone, rough and nodular, skirted the anatomical neck of the humerus at the attachment of the capsular ligament. Rough modules of bone had also sprung off from the inner and lower portion of the glenoid

* Read before Chicago Medical Society, June 4, 1888.

fossa. The fossa itself was filled with a semi-solid structure. Dr. Bogue, who witnessed the examination, gave it as his opinion that the joint had long been affected with rheumatic arthritis, and that the dislocation was one of long standing. Subsequently the doctor's induction was verified. From friends of the patient we learned that he had for years complained of rheumatic pain in the left shoulder, and that the dislocation occurred some twelve months prior.

Case II.—Oct. 24, 1875, a young man in the prime of life, muscular and well developed, presented himself at Dr. Gunn's clinic, with a sub-glenoid dislocation of the head of the right humerus of six weeks' standing. An unsuccessful attempt at reduction had been made some ten days before. The patient was profoundly anesthetized and the old adhesions broken up. Prolonged manipulation and force failed to reduce the deformity, although the head of the bone could be thrown on to the dorsum at the scapula, and all about the glenoid fossa. Two weeks later the joint was cut down upon and the capsular ligament found to be very much thickened. The head of the humerus had escaped from this on the inner side through a button-hole rent, which finally grasped the anatomical neck. The coracoid process had been fractured at its middle at the time of the dislocation. The head of the bone was replaced, but the operation was followed by prolonged suppuration and necrosis, greatly endangering the patient's life. As to the ultimate result, I know nothing about it.

Case III.—In February, 1876, a

woman of average general appearance and health, aged 60, came to my office wearing a large plaster over her right shoulder. The head of the humerus was in the axilla. She stated that four months before she had fallen from the sidewalk a few feet into the ditch, striking on the point of her shoulder. The same day, a general practitioner diagnosed it a sprain, and it had been treated as such ever since. She complained greatly of pain in the arm and numbness in the extremity. The fingers were contracted and the hand perfectly useless. The old lady was entirely dependent upon her own exertions for her living, and was fearful of being sent to the poor-house, unless relieved. The dangers and difficulties of an attempted reduction with possible failure to improve her condition and the risk of making her worse, were fully explained. She urged that an attempt be made. Under ether the adhesions were broken up and the head of the bone manipulated into place, with little or no difficulty. It was fully two years before she entirely recovered the usefulness of her arm and hand. She is to-day, at the age of 72, still earning her own living with comfort and satisfaction to herself.

Case IV.—In March, 1883, I saw, in consultation, a short, thickset, very fleshy woman, 35 years of age, who six weeks before had tripped on the carpet, falling forwards and at the same time sideways to the floor, the brunt of the force being received on the right hand. The family physician, a most excellent general practitioner of twenty years' experience, was called in on the following day, and without any special

examination, pronounced the injury a severe sprain, and treated it accordingly. At our examination, with all clothing removed from the chest, the subglenoid dislocation was not at all apparent to the eye, owing to her exceedingly fleshy condition. Under ether anesthesia the old adhesions were broken up and several attempts at reduction, both by manipulation and extension, with the heel in the axilla. The head of the bone was fully movable about the glenoid cavity, but could not be forced into it. After almost an hour of fruitless effort, we were on the point of giving the case up as being beyond our skill, when in simply lowering the arm and placing it at the side, preparatory to abandoning the case, the head slipped into place. In a few months she made a good recovery, regaining the entire use of the arm.

Case V.—This was one of recent dislocation of the head of the left humerus into the axilla, with a fracture of the anatomical neck. The dislocation was not reduced; the fractured bones healed; the patient was content with a fairly useful arm. This accident is of so rare an occurrence that you are justly entitled to the points of the diagnosis. I find no similar case referred to in the text-books consulted. In the *American Journal of American Sciences*, for January, 1884, one is reported by Morton, of Philadelphia. The patient was a man of 75 years of age. For fear that the head would necrose, it was removed by incision. Death followed in two weeks from diarrhoea.

On February 7, 1887, the writer saw, in consultation with Dr. T. J.

Shaw, a man 53 years of age, of poor general appearance and health. Five days previous he fell from the sidewalk, striking the arm about three inches below the head of the humerus, against a block of ice. The doctor was not called until 24 hours later, when the shoulder and arm were swollen to the utmost extent of the skin. The doctor discovered crepitus, and was convinced that the head of the bone was displaced from its normal position in the glenoid cavity.

He very appropriately ordered hot fomentations, which were faithfully applied up to the date of our observations. An examination of the patient, under ether anaesthesia, was made. The parts were somewhat swollen and discolored. A depression was found where the head of the bone should be, normally. The head was felt in the axilla below the middle of the clavicle. There was distinct crepitus and abnormally pre-mobility, while the head did not move with the arm. The upper extremity of the lower fragment could be distinctly felt when it was thrown forward, by carrying the elbow backwards. We were able to pass our fingers all about this and still feel the head of the bone above. When Duga's test was applied, the elbow came easily to the chest without materially altering the position of the upper end of the lower fragment. An unsuccessful attempt was made to place the head in its normal position. Coaptation of the fragments were secured, and the padded arm bandaged to the chest. The result of the examination was related to the friends, and the following prognosis given:

First—The bones may fail to unite.
Second—He may have a useless arm.
Third—in six or eight weeks' time, should union occur, it would then be a question as to the advisability of an attempt to reduce the dislocation.

The treatment for the present was to place the parts at rest in such a way that nature could weld them together. If this statement was not satisfactory to the relations, we advised them to secure the services of some one else. They requested us to continue in attendance. The patient has now a very useful arm. He can easily get the hand to the top of the head; can move the elbow forwards, backwards and outwards from the body.

Case VI.—May 8, 1888, a well-to-do gentleman 58 years of age, with a sub-glenoid dislocation of the head of the left humerus was referred to the writer from a neighboring state.

He stated that almost ten weeks ago he fell from a wagon, receiving an injury to the left arm which was diagnosed a fracture at the junction of the upper and lower two-thirds, and was treated as such. Three weeks ago another home surgeon informed him that the other arm was out of place, and an unsuccessful attempt was made to reduce it. Examination, without an anæsthetic and with the chest bared, the man appeared as well preserved, of average height and weight. The left upper extremity was markedly smaller than its fellow. The head of the humerus was firmly fixed in its abnormal position, admitting only a very limited range of motion. This feature was, however, improving. He complained of some numbness in the hand; particu-

larly the index finger. This was also improving. The patient can readily lift his hand to his mouth. The possible favorable results of an attempt to reduce the deformity were set fairly before the patient. Taking into consideration the length of time which had elapsed since the injury; the fact that he was gradually regaining the use of the member, and that he was both beyond the active period of life and so situated financially that physical labor was unnecessary; the question was left to his own judgment, whether he preferred remaining content with his position as it then was, or taking the chances of attempted reduction, which might possibly render his condition worse. I would, however, do my utmost to reduce the deformity should he so desire. He, very wisely, I think, decided to let the arm remain as it was. I am confident that time will give him a very useful member.

I have seen in the practice of my colleagues other cases of like injuries, and know of more where accidents have occurred in attempts to reduce them. Of these six personal cases, one lost his life as a result of the attempt at reduction. One, after months of suppuration and necrosis, probably recovered with an ankylosed shoulder. One with a fracture with the dislocation, was content with the union of the fracture and the head unreduced. One was satisfied to let the dislocation alone rather than take chances on surgical interference. In two cases of six weeks and two months duration respectively, the patients recovered the use of the parts after reduction. One after months, and the other after two years of suffer-

ing. In three of the six cases a mistake had been made in diagnosis at the time of the injury. This last feature is worthy of special attention.

From a medico-legal point of view the general practitioner and surgeon who dabbles with injuries that may be followed by fracture or dislocation, takes upon himself an enormous responsibility, accompanied with risk. No man should practice surgery without the fear of the law constantly before him. A superficial and cursory examination with a guess at the result, should never be indulged in here, if the physician values his reputation or pocketbook. The fullest opportunity should be given under anæsthesia, if desirable to render a positive diagnosis. Failing to obtain this, the attendant would be wise to abandon the case at once.

Patients as a rule know nothing at concerning the gravity of a joint injury, either a simple sprain, dislocation or fracture into the joint. If the part is not restored perfectly in contour and function, they are prone to attach blame to the attendant, and often seek redress in the courts. This is rendered especially easy by the competition in the legal profession, and the ease and freedom from expense by which a suit for damages may be instituted.

Last summer an enterprising firm of young limbs of the law employed a sharp young man to drum up injuries of all kinds. Fifty per cent. of all damages and freedom from expense to the suitor, were the inducements offered. I know the sharp young man well, and can vouch for the statement that he made good wages at his nefarious business.

To guard against such a system of blackmail, the surgeon cannot be too careful in keeping accurate notes of the case, detailing at the time the symptoms, nature of the injuries, conversation had with the patient, parents or friends, and being especially careful to mention who were present as witnesses to what was done, and the conversation. I am creditably informed that such notes would be of inestimable value to the surgeon should the case come to trial. Indeed, so patent are they that these schemers will religiously avoid the surgeon who is known to possess such a bulwark of defense. Some years ago this system collected my bill and saved me from a suit in the case of a comminuted fracture and dislocation of the elbow joint, when the result was not what I should like to have had.

Dislocations of the head of the humerus are of more frequent occurrence than all other luxations combined. When of a recent occurrence, with the patient anæsthetized, the diagnosis and replacement is, in a vast majority of cases, not a difficult task. When, however, the dislocation is of some weeks duration, the reduction is liable to prove very difficult, and may be followed by serious consequences to life or limb.

The literature of the subject is replete with records of such accidents. In two cases with noted surgeons the limb was torn off, one at the elbow, the other at the shoulder. An unwarrantable of amount of force does not seem to have been resorted to in either case, though in both cases the patients were old.

The most frequent seat of injury

seems to be in the blood vessels. Dr. L. A. Stimson, in the *Annals of Surgery* for November, 1885, has collected forty-four cases of "Injury to the main blood vessels of the axilla, caused by efforts to reduce dislocations of the shoulder." Of these cases thirty-one died, twelve recovered and in one the result is not known. These cases did not all come under the head of old dislocations, some being reported as recent. One died from hemorrhage when reduction was made on the twelfth day after the injury.

The question, then, very naturally arises, what particular cases of old dislocations should an attempt at reduction be advised? I would say, in none whatever, without first acquainting the patient or his friends with the possible danger in that particular case. Give all the information you can, both favorable and unfavorable, and then leave the question entirely with them to decide. If, on the other hand, the question is left for you to decide, then pursue whatever course seems wisest in your judgment; then I think we should always be guided by something like the following principles: If the patient is in the active period of life, and incapacitated for following his or her vocation, and, further, if not more than three or four months have elapsed since the accident, our duty would be to make a reasonable effort at reduction. If, on the other hand, the active period of life is passed, and the suffering is not very great while the patient is not dependent upon physical labor for a livelihood, we should advise that he remain satisfied with the present condition, confidently expecting that

ultimately the arm will become a very useful one. Of course no invincible rules can be laid down in this or any other question of a similar nature. While most authors assign three months as the limit at which such injuries should be left to themselves, still there are many exceptions to the general rule, which the individual judgment and boldness of the surgeon must decide for himself. A number of cases are reported where a safe reduction has been made at the end of eleven or twelve months after the original injury, and one notable case is reported by Dr. Edmund Andrews, in the *Encyclopedia of Surgery*, where a dislocation of four years' standing was jerked into place by a refractory horse. Still the rule already given is the safest one to follow—not to interfere, in the majority of cases, when three or four months have elapsed after the injury.

The forces which resist reduction in a recent dislocation have been variously stated by different surgeons. Some maintain that the chief factor is the un torn portion of the capsular ligament; others that the tenacity of the various muscles about the joint are the prime opposing forces. In an old dislocation we may add to them the tension caused by the cicatricial contraction of the injured muscles and ligaments, and the new adhesions formed about the dislocated head.

Owing to the importance of the subject and the meagerness of literature, either in periodicals or text-books of the day, concerning the appearances shown by dissection of the dislocated shoulder, both recent and old, I may be pardoned for quoting so old a writer as

Sir Astley Cooper, who records three such cases, examined by himself, and detailed in his masterly work on dislocations and fractures.

Case I.—Adult male, a sailor. Dislocation downward and of one day's standing. “The axillary artery and plexus of nerves were thrown out of their course by the dislocated head of the bone being pushed backward upon the subscapular muscles. The deltoid muscle was sunken with the head of the bone. The supra and infra spinatus were stretched over the glenoid cavity and inferior costa of the scapula. The teres major and minor had undergone but little change in position, but the latter, near its insertion, was surrounded by extravasated blood. Coracobrachialis was uninjured. On a space between the axillary plexus and coracobrachialis, the dislocated head of the bone, covered by its smooth, articular cartilage and by a thin layer of cellular membrane, appeared. The capsular ligament was torn on the whole length of the inner side of the glenoid cavity, which would have admitted a much larger body than the os humeri through the opening. The tendon of the subscapular muscles, which covers the ligament, was also extensively torn.

“The opening of the ligament, by which the tendon of the long head of the biceps passed, was rendered larger by laceration, but the tendon itself was not torn.

“The head of the os humeri was thrown on the inferior costa of the scapula, between it and the ribs; and the axis of its new situation was about one inch and a half below that of the

glenoid cavity, from which it has been thrown.”

Case II.—Woman, 52 years old. Dislocation into the axilla of five weeks' standing. Violent attempts had been made to reduce the dislocated bone, but without success. “All the appearances were distinctly marked; the deltoid being flattened, and the acromium pointed. The head of the bone could be distinctly felt in the axilla; the skin had become abraded during the attempts at reduction, and the woman apparently died from the violence used in the extension. Upon exposing the muscles, the pectoralis major was found to be slightly lacerated and blood effused; the latissimus dorsi and teres major were not injured; the supra spinatus was lacerated in several places; the infra spinatus and teres minor were torn, but not to the same extent as the former muscles.

“Some of the fibres of the deltoid muscles had been torn and a few of the fibres of the coracobrachialis; but none of these muscles had suffered so much injury as the supra spinatus. The biceps were not injured. Having ascertained the injury which the muscles had sustained in the extensions, and having thus learned in some degree the resistance which they opposed to it, I proceeded to examine the joint. The capsular ligament had given way in the axilla, between the teres minor and subscapular muscles. The tendon of the subscapularis was torn through at its insertion into the lesser tubercle of the os humerus; the head of the bone rested on the axillary plexus of nerves of the artery.

"Having ascertained these points by dissection, I next endeavored to reduce the bone, but found the resistance such that I could not by myself overcome, which made me very anxious to ascertain the great source of resistance. I therefore divided the muscles one after another, cutting through the coracobrachialis, teres major and minor and minor and infra spinatus muscles; yet still the opposition to my efforts remained, and with but little apparent change. I then conceived that the deltoid must be the chief cause of my failure, and by elevating the arm I relaxed this muscle, but still could not reduce the dislocation. I next divided this muscle, and then found the infra spinatus muscle my great opponent, until I drew the arm directly upwards, when the end of the bone glided into the glenoid cavity. The deltoid and supraspinatus muscles are those which most powerfully resist reduction in this accident."

Case III. — Adult, dislocation into the axilla. Designated old. "The head of the bone is found altered in its form; the surface toward the scapula being flattened, a complete capsular ligament covers the head of the os humeri. The glenoid cavity is completely filled by ligamentous matter, infused by slow inflammatory process. Small portions of bone are suspended in this ligamen-

tous matter, which appeared to be of new formation, as no portion of the scapula or humerus is broken; a new cavity is formed for the head of the os humeri in the inferior costa of the scapula, but this is glenoid as that from which the os humeri had escaped."

The first and most important feature in reducing an old dislocation is to effectually and thoroughly break up the adhesions. This must be done slowly and with the greatest care, using the forearm as a fulcrum fixed at a right angle to the humerus. I have on several occasions seen the late Dr. Gunn rotate the arm through more than a complete circle. Then manipulation or force, applied in the usual way, will generally reduce the dislocated head.

In closing this subject I can use no better or appropriate words than those of Stinson in the article already referred to, in which he investigates only one of the possible accidents liable to occur, namely, rupture of blood vessels. He says: "Even a dislocated arm may be useful, and the fatality of this accident more than 70 per cent. of deaths, may well cause the surgeon to hesitate to incur the risk, merely for the sake of ameliorating a condition which does not endanger life and is quite compatible with activity and usefulness."

SELECTED ARTICLES.

ANTIPYRIN, ANTIFEBRIN AND PHENACETIN IN THE TREATMENT OF PULMONARY CONSUMPTION.

BY THOMAS J. MAYS, M. D., PHILADELPHIA, PA.

Although these therapeutic agents have been but recently introduced to the profession, their range of usefulness

already extends over a wide domain of practical medicine, and, although it is quite certain that in many instances

their virtues are greatly over-estimated, I think that the practical results which will be offered in this paper show if these substances are properly administered they form a most valuable and important addition to the therapeutics of pulmonary consumption. In common with the practice of the day, I gave antipyrin for several years solely with a view of obtaining its febrifuge properties, and, while there can be no question regarding its power in this respect, more recent experience has taught me that this is not its only mission, and that it is a serious mistake to discontinue its use in cases of phthisis after the elevated temperature has been reduced very nearly or altogether to a normal point. Experimental research and the successful employment of these drugs in other diseases, notably in chorea, epilepsy, neuralgia, gout, and chronic rheumatism which are unaccompanied by fever, point out that they possess an undoubted action on the nervous system, and their great utility in the treatment of phthisis is probably entirely due to the marked stimulating influence which they exert on this structure of the body. The remedial value of these agents is therefore not fully obtained unless they are continued after their use as antipyretics has ceased, for there is much reason for believing that the fever, the inflammation, the dyspnoea, the anorexia, and many other collateral processes in pulmonary phthisis are in a great measure dependent on disordered innervations, and that the remedy which controls the first-named symptom will also control the others. This distinction between the purely antipyretic action of these drugs and their power to counteract the other disorders is too important to be overlooked in the treatment of this disease. In my earlier observations on the clinical effects of antipyrin, I often noticed that, in giving it to phthisical patients with a high temperature and with a hopeless physi-

cal condition, the fever came down at once, and an improvement immediately followed in the accompanying conditions. I have notes of several cases, one of which I will briefly relate, in which the most surprising results occurred. A young woman, aged 19, with a large cavity in one apex and general destruction going on in the other lung, consulted me in June, 1885. I attended her, off and on, during that summer and autumn, without being able in the least to make an impression on the rapid progress of the disease, until the following October, when, at a loss what else to do, I prescribed ten grains of antipyrin, forenoon and afternoon. In spite of the small size of the dose, which was given in order to prevent the production of a serious collapse—a view which prevailed at that time—a complete transformation in her whole condition took place. Her fever came down, of course, but the cough and expectoration also became less, the night sweats ceased, her appetite and general strength improved, and she felt better in every way. The disease had, however, produced too serious inroads on her health to hold out much encouragement toward the prolongation of life, and she died the following December. The valuable lesson which this case should have taught me at the time was wholly overlooked, because I was imbued with the prevailing belief that, after the full antipyretic effect of antipyrin had been secured, it became a superfluous and perhaps a harmful agent, and would have to be discontinued.

So little impression did this case make on my mind as to the true and permanent remedial effect of antipyrin in phthisis that I then failed to appreciate the import of a very interesting paper by Dr. J. Holland, of St. Moritz, Switzerland, which appeared in the *Practitioner** about the same time, and in which he reports a series of cases of phthisis also treated with

* Antipyrin in Phthisis and other Febrile Disorders. *Practitioner*, vol. xxxiv, p. 521.

antipyrin; and evidently, like myself, administered the drug then only with a view of obtaining its febrifuge action, although, in the light of our present knowledge of its action, it is quite evident that it played a deeper rôle. His results were, however, so striking and in such perfect harmony with what I have since witnessed myself that I shall take the liberty of quoting the history of some of his most noted cases.

“*Case I (Holland)* — In last July (1884), I was consulted by a lady who was in advanced consumption. That morning she had spat up about two tablespoonfuls of blood, and, on examining her chest, I found a cavity at the left apex, with extensive softening all around it; there was also softening at the right apex in front, but over a limited area; the cough was particularly troublesome, and appeared to be out of proportion to the amount of expectoration, although this was considerable. Her high temperature persisted and rose daily to about 102°; indeed, during the last week, it had on three occasions reached 103°, being highest from 4 to 6 p. m. Her temperature on first visit was 103.2°. I advised total rest in bed, a light nutritious diet, a dose of Carlsbad salts the first thing in the morning, to be followed by $\frac{1}{8}$ gr. morphine and $\frac{3}{8}$ gr. digitalis leaves every three hours. Next morning at 10:30, her temperature was 101.4°; in the evening, 103°. Instead of the digitalis, I now prescribed fifteen grains sodium salicylate every three hours. The night of the same day, her temperature rose to 103.6°, and her cough was more troublesome. I now determined to try something else, and gave her twenty grains of antipyrin every three hours while awake, until three doses had been administered. The next afternoon I saw her at the usual hour, and directly I entered the room I noticed how much better she looked. She told me she had taken the first

dose of the antipyrin on the previous evening at 6 o’clock, and in less than an hour afterward she felt more comfortable and less feverish; at that time she found her temperature 101.6°. At 9 p. m., just before taking the second powder, it was exactly 101°, and, at a quarter to eleven, 100.4°. She had slept well, only waking up when the cough troubled her, and eaten better, and altogether felt herself much better and more comfortable than she had done for weeks. The next evening her temperature registered 100.4°. My patient complained of no disagreeable or unusual sensations. I could discover no altered physical signs in the chest, and there had been no evacuation of large quantities of expectoration or anything else that could account for the fall of temperature, except the action of the drug itself.

“On the fifth day she reported: ‘Temperature at 9:30 last night, when I took another powder, exactly 100°, this morning at 9 a. m., 98.8°; at 2 p. m., when I took my last powder, it was 99°. Had a good night, cough and expectoration not so troublesome, no perspiration, taking more food and feeling much better.’ During my visit on this day at 5 p. m., her temperature was 99.2°. I ordered another powder at 8:30 p. m., and two hours afterward the temperature was normal. Sixth day: Patient had a good night, cough and expectoration still diminishing, no perspirations, appetite and digestion good, spent two hours out of bed. Temperature 9 a. m., normal, and at 10 p. m. normal. Took a powder at 2 and at 6 p. m. Seventh day: Fairly good night, cough and expectoration a little more troublesome than the night before, but slept well on the whole; appetite and digestion good; no perspirations; spent four and a half hours out of bed. Temperature at 5 p. m., 99°; took a powder at 2 and 6 p. m. Eighth day: Temperature normal all day; took two powders. Ninth day:

Same report. My patient continued the antipyrin twice a day for four days longer, and once daily for about a week afterward. During this period she had only an occasional elevation of temperature, the highest registered being 100° . Her cough improved, the expectoration became less, and she was able to take carriage exercise. In a month from the time I first saw her she had gained three pounds in weight and she only coughed and expectorated in the morning. The physical signs had improved in proportion, for the softening at the right apex had cleared up, and had conspicuously diminished around the cavity at the left side; the cavity itself showed signs of healing, and freer breathing was heard all over the left lung." He further states that this patient spent the following winter at St. Moritz, gained fifteen pounds in weight, temperature nearly normal since the previous August, became able to walk ten miles with very little fatigue, her appetite and digestion remaining excellent.

Case VI (Holland) (Abstract).—A woman with troublesome cough consulted him in July, 1884. She had a bad family history, and her chest showed moist sounds in both apices. Evening temperature, 100° . Prescribed bitter tonics for her, with antipyrin, and sitting outdoors all day long. She lost her fever at once and improved rapidly, both lungs drying up quickly. So far as he knew she had no recurrence of the attack.

Since the publication of Dr. Holland's paper, several other antipyretics have been brought to the attention of the profession. Among the most valuable of these are antifebrin and phenacetin. The former is well-known already, and the latter bids fair to become its successful rival. About a year ago, directly after its discovery was announced, I received a small quantity of phenacetin through the kindness of Mr. Merck, with which I made some clin-

ical observations, the results of which were published in the *Medical News* for August 20, 1887, under the title of "The Effects of the Latest Febrifuge, Acetphenetidine," as it was first known. Altogether the drug acted very favorably, and I have at intervals continued its use since then. Its action is as decided as that of antipyrin and antifebrin, and it is said to be less liable to produce toxæmia. The first case in which I gave it was one of acute phthisis, with an afternoon temperature of 105.3° , which was preceded by a chill. She received three grains of the drug every three hours. The next afternoon she had another chill, and her temperature was 104° . The third day she had no chill, and her afternoon temperature had sunk to 101° . The fourth day she had another chill, but her afternoon temperature only rose to 101.2° . The fifth day her temperature was down to 98° , and the phenacetin was discontinued. On the sixth she had no chill, but her temperature rose to 101° , p. m. Seventh day: Chill, afternoon temperature 103.4° . Resumed the drug. Ninth day: Afternoon temperature 100.8° . Tenth day: Afternoon temperature 100.6° . At this point the supply of the drug became exhausted. The other case was one with an old cavity and a temperature in the evening of 102° . He received the same dose. Second day: Afternoon temperature 101.4° . Third and fourth days same; fifth day, 100° . It was quite obvious from this limited experience with the drug that it had a marked influence in depressing the temperature, and, beside this, it seemed to improve the cough, expectoration, appetite, and the general condition of the two patients. Subsequent use of the drug showed me that I gave it in too small doses in these cases. It is a valuable antipyretic, and, were it not for its expensiveness, which is even greater than that of antipyrin, it would soon become very popular; but, so long as

the same results can be obtained by antipyrin, or by antifebrin, which is the cheapest of all the antipyritics, its consumption will probably be rather limited. I think, however, that in giving these agents it is a good plan to occasionally alternate one with the other. Very frequently one of them disagrees, as in the case of antipyrin, which sometimes produces urticaria, or as in that of antifebrin, which brings about lividity of the lips, gums, finger nails, etc., and then it is very advisable to resort to phenacetin, which is believed to be free from evil consequences.

One thing must always be remembered in the administration of these agents, and that is that small doses, which are usually available in the reduction of the fevers of acute diseases, are practically useless in subduing the fever of chronic phthisis. Eight or ten grains of antifebrin and phenacetin, and twelve to fifteen grains of antipyrin every four hours, are small enough doses to begin with, and frequently they will have to be largely increased before the desired results are secured.

I shall now present the histories of a few cases of phthisis which were treated chiefly with antipyrin, or antifebrin, or with both, in order to demonstrate the salutary influence of these drugs in this disease.

Case I.—W. V., man, aged twenty-three, was first seen March 27, 1888. He then had a cough which had lasted for some time, a profuse yellow-whitish expectoration; no haemoptysis, was losing flesh (weight 109 pounds), appetite poor, tongue coated, had chills, fever and night-sweats. His mother, father, and one sister died of phthisis. Physical signs, right lung: Tympanic percussion sound in apex, indicating a cavity extending to second intercostal space in front. Dulness from this point to base of lung in front, and from apex to base behind. Moist crackling over cavity, and crepitant and subcrepitant over the remaining portion of the lung an-

teriorly and posteriorly. Afternoon temperature 102.6° . March 28, afternoon temperature 104° ; antifebrin, four grains every three hours, inhalation of 25 per cent. aqueous solution of ichthyol through respirator. April 3, cough less, temperature 101° ; same treatment. April 9, temperature 104° ; seven and a half grains of antipyrin every four hours with the ichthyol inhalations. April 7, p. m. temperature 100° , cough and expectoration very much less, night sweats diminished, appetite very good, and his strength is improved. May 14, appetite good, p. m. temperature 102.5° ; same treatment. May 28, p. m. temperature 101° . The antipyrin now produced its characteristic eruption, is discontinued, and ten grains of antifebrin every three hours are substituted. June 26, coughs and expectorates very little, appetite very good, p. m. temperature 100° . July 6, feels very good, p. m. temperature 100.5° , weight 116 pounds; same treatment. Physical examination shows that the dulness in front from second intercostal space to base of lung had disappeared, and that the dulness behind had markedly diminished. No moist râles audible anywhere except some crackling over cavity area. Cavity is much more dry than when first seen. His trade is an outdoor one, and he has been at it for some time.

Case II.—July 3, 1888, L, woman, aged 21, had pleuro-pneumonia two and a half years ago, has now a cough and yellow expectoration for six months, is losing flesh, poor appetite, night sweats, and temperature at 104.25° . No family history of phthisis. Physical signs, left lung: Cavity in left apex; below cavity to base exists an abundance of râles anteriorly and posteriorly. Mucus râles over whole lung. Eleven and a quarter grains of antipyrin every four hours. July 7, she felt better, appetite improving, and she had a temperature of 102.6° ; twelve grains of antifebrin every four hours. July 10, tempera-

ture 101; same dose of antifebrin every three hours. July 12, cough and expectoration much better, boil in left axilla, eats good, temperature 102. July 14, feels better, temperature 101°; same treatment. July 16, appetite good, night sweats less, temperature 99.5°. July 20, temperature 101.2, appetite good. July 28, feels very good, eats well, temperature 98.5°. Temperature was taken only in the afternoon. Still under observation.

Case III.—Woman, aged thirty, was first seen May 8, 1888. She has been coughing for eight years, expectoration profuse and of a gray color, no haemoptysis, but was losing flesh, had night sweats, no appetite, irregular bowels, tongue coated, œdema of both insteps, temperature 104°, weight 90 pounds. Physical signs show a large cavity in upper third of right lung, with crepitation in extreme end of apex. Mucus râles from cavity down to base, anteriorly and posteriorly on same side. Crepitation at apex and base of right lung. Chest and whole body very much emaciated. She received seven and a half grains of antipyrin every four hours with ichthyol inhalations. May 12, her temperature was 101.25°, her cough was better, and expectoration had markedly diminished, the appetite improved, and she said she felt stronger. May 26, temperature 100°, felt very much better; antipyrin was increased to eleven and a quarter grains every four hours. June 5, temperature 99.8, felt very good. June 8, temperature 101.5°; antipyrin was now increased to fifteen grains every three or four hours until up to the present writing, the temperature being generally 99° or 99.5°, only rising once to 101°. She is now and has been for some time able to take from one quart and a half to two quarts of milk, three-quarters of a pound of raw beef, an egg, and raw beef suppositories per day. The night sweats are improved, the œdema of the feet

has disappeared, and although she has not gained much if any in weight, she looks and feels quite different. Some days she has taken as high as seventy grains of antipyrin, without producing more disturbance than a slight lividity of the lips and finger nails, and a rash which appeared only during the last week. She was at once placed on eleven and a quarter grains of antifebrin every three hours. The beneficial effects of antipyrin became manifest directly after its first administration, and have certainly continued up to the present time. The temperature was taken in the afternoon.

Case IV.—P., man, aged thirty-five, came under my care June 21, 1888, with the following history: Well until last January, when he was taken with a chill, began to cough and expectorate yellow sputum, had slight hemorrhages, appetite poor, tongue coated, lost flesh, and afternoon temperature 101°. Two of his sisters died of consumption, aged sixteen and eighteen years respectively. Physical signs: No impaired percussion-resonance, sibilant and subcrepitation râles in both apices, and crepitation at base of both lungs, marked especially in lateral and posterior areas. Beside these, there are distributed small areas of subcrepitation over different parts of both lungs, especially the left at the intercession of the sixth rib with the nipple line. Treatment, six grains of antifebrin every three hours, inhalation of compressed and rarefied air pulmonary gymnastics, a nutritious diet and flaxseed poultices. The antifebrin in the course of a few weeks was increased to twelve grains every three hours; his temperature gradually sank, he improved in cough, appetite and strength, and, on the 25th of July, when his temperature was normal and had been so for some time, his chest showed the following physical signs: Very few râles in right and none in left apex, few crepitations at base of left lung, chest

movements very much increased. In this time he gained one pound and a half.

Case V.—C., man, aged thirty-four, consulted me May 9, 1888. Cough and expectoration since previous July, losing flesh, poor appetite, coated tongue, dyspnoea, and an afternoon temperature of 101° . Weight 110 pounds. Physical condition: Cavity in left apex, and mucus râles distributed over same lung; right lung normal, although whole chest is very flat and immobile. He was treated principally with antipyrin and pulmonary gymnastics. His temperature also came down, and he began to improve in every respect. On the third of July, he weighed $117\frac{1}{4}$ pounds.

I could quote many other cases in

support of the practical usefulness of these agents in the treatment of pulmonary consumption, but they would demonstrate no more than what has already been shown. I do not wish to convey the meaning that they are specifics, but I do mean to say that they are most important levers with which we are able to stay the fever, tone up the nervous system, improve nutrition, and compel the disease to give us time and opportunity to feed the patient and to modify the local condition of the lungs by external applications, pulmonary gymnastics, physical exercise, etc.—most essential considerations in the therapy of this stubborn disease,—*Med. and Surg. Reporter.*

A NEW METHOD OF INCISION OF THE INTESTINE.

BY H. H. MUDD, M. D., ST. LOUIS, MO.

Read in the Section on Surgery, at the 39th Annual Meeting of the American Medical Association, May, 1888.

Enterectomy, or the resection of a portion of the intestine, is regarded as such a tedious and prolonged procedure that many operators hesitate to undertake it in cases in which it is the ideal and desirable operation.

Prolonged exposure of the abdominal viscera and much manipulation of the intestines, adds so much to the shock and also to the danger of exciting peritonitis, that the time and manipulation required by the ordinary methods of excision often render impossible the attempt to thus restore the natural channel.

The tedious and time-taking steps in the operative methods commonly used have consisted—

Firstly—In the great number of interrupted Lembert or Czerny-Lembert sutures used—twenty or thirty being the approximate number.

Secondly—In the difficulty of placing accurately the sutures at an even distance from the serous margin of the

excised border. This margin is concealed and overlapped by the everted mucous membrane; the cut edge is soft, pliable and hard to manage while placing the sutures.

Thirdly—There is difficulty in finding an instrument to compress the bowel so as to prevent the escape of faecal matter without injuring its delicate structure, and at the same time not impede the movements of the operator. The fingers of an assistant are the best, but these tire when so many sutures are to be placed, and the hands of an assistant are in the way of the operator.

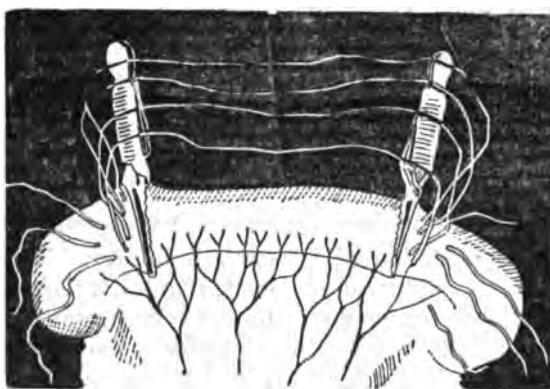
I shall not attempt to compare the various operative methods pursued in the resection of the intestine, nor yet attempt to discuss fully the merits of the method which I submit to you for your consideration. The method I have followed obviates some of these delays and difficulties; hence, I venture to submit it to you for your criticism.

and for trial. The value of any such procedure depends somewhat upon the operator and his familiarity with it, and its general utility can only be attested by the experience of the various surgeons to whom it may commend itself.

The method I have followed during the past few years is one that I first tried March 16, 1886, when called upon to excise a portion of gangrenous intestine for hernia, and as it answered well, I have continued its use in such cases as have demanded resection at my hands, as also in some experimental work.

The method is as follows: The loop of the bowel being made free and easy

ceps, passed through the serous and muscular coat into the sub-mucous, making its exit about an eighth of an inch from the line of the forceps, after traversing nearly one-fourth of an inch of the intestinal wall. The needle is then carried across the space between the forceps and enters the intestinal wall one-eighth of an inch from the proximal side of the other pair of forceps, and traverses the wall of the intestine, as before described. The thread of the suture thus placed should be long, so as not only to leave a free loop between the two ends of the bowel, but also to give the free ends which are necessary to security in managing



(No. 1.)

of access, two pairs of forceps are placed upon it, marking the lines at which the excision is to be made. Seven or eight presection interrupted Lembert sutures are to be placed before the portion of the bowel to be removed is excised. The outer borders of the forceps serve as an accurate guide for their insertion. A common cambric needle, threaded with a long piece of fine silk, is used to place these interrupted sutures. (See cut No. 1.)

They are quickly placed, for the intestine is firmly held by the Péan catch-forceps or the preputial forceps, which are used as clamps. The needle is entered about three-eighths of an inch from distal side of one pair of the for-

the sutures. Two of these sutures, seven in number, should be so placed as to have one on each side of the menentery; another at the free margin and two intervening sutures on each side of the bowel, dividing equally the space between the free and mesenteric borders. These sutures should be left with long threads and not tied until after the excision is made.

The mesentery should now be secured, by including it, when not more than two or three inches of the intestine is removed, in a single ligature which should be placed parallel to, not more than half an inch from the mesenteric border of the intestine. The section of the mesentery is made between the

ligature and the border of the gut. The portion of the mesentery included should be fully equal to the intestine excised.

The section of the intestine is now to be made. Before making the section, the bowel at the proximal and distal side is emptied of its contents and held by an assistant with his fingers. The operator now slips a finger on each side of the portion to be removed, but under the loops of the sutures, and carries these loops first to the distal and then to the proximal side of the two pairs of forceps. The scissors are introduced between the suture loops and the bowel. The section of the bowel is made first at the distal side

does not necessarily invert any more of the bowel. The time occupied in such an operation ought not to be more than fifteen or twenty-five minutes, after the bowel is exposed and makes possible an enterectomy when the older methods are not permissible, for the time occupied need not exceed that necessary for the production of an artificial anus.

The advantages believed to be possessed by this method of operation, are:

1. The manipulation of the portions of the intestine which are to be united is reduced to a minimum.
2. All tissue which has been included in the grip of the compression forceps is removed.
3. The line of the forceps gives an



(No. 2.)

and then at the proximal end. The bowel and the forceps are removed together.

The line of the Lembert sutures, when thus placed, is even and regular. These presection approximation sutures are tightened as soon as the portion to be excised is to be removed, and the divided ends cleansed. A continuous suture of fine catgut carried about the bowel, approximates more perfectly the surface of the serous membrane, and closes any gap that may be left between the interrupted sutures. (See cut No. 2.) The seven interrupted sutures thus placed are quickly and readily tied after the section is made. The continuous suture is easily applied and

accurate and perfect guide for the placing of the sutures, and makes certain the section and the reunion of the bowel at right angles to its axis.

4. The rapidity with which the interrupted Lembert sutures can be placed is very much greater than where the attempt is made to put them in position after dividing the bowel, and the divided ends are not long exposed; hence, it is more nearly the ideal aseptic operation.

5. The union of the divided ends is accurate and sufficiently firm to retain fluid matter. This is accomplished with a few—seven or eight—interrupted silk sutures and a continuous catgut suture placed in or near the same line

as that occupied by the interrupted sutures. The continuous catgut suture extends around the circumference of the bowel, reinforcing and sealing the Lembert sutures.

6. The eversion of the mucus membrane is controlled and faecal extravasation is prevented.

7. The time necessary to complete the operation is shortened, because (a) the clamps give easy and perfect control of the suture line; (b) a limited number of interrupted sutures are used; (c) the continuous catgut suture is quickly and easily placed; (d) there is no delay in pushing out of the way the everted mucus membrane which so much delays the placing of the interrupted sutures.

The difficulty of securing the serous margin and holding quietly the edge that is to be approximated can be appreciated only by those who have made the effort.

The only stumbling block in the way of a rapid and satisfactory operation is the management of the long threads of the presection Lembert sutures after placing them, and while making the

section of the bowel. This is easily overcome by placing them on a folded towel and by slipping the fingers under the central portion of the loops on each side of the bowel, and carrying the loops back with the fingers beyond the forceps, over the healthy intestine, previous to making the section. The interrupted and the continuous sutures should be carried well down into the wall of the bowel, so as to include the sub-mucus tissue.

The Péan catch forceps answer well for the clamps. I have, in the human subject, had a successful case where a free evacuation of the bowel followed the operation within twenty-four (24) hours, and occurred daily thereafter. Postmortem examination after thus excising gangrenous intestine, the result of strangulated hernia, has uniformly demonstrated good union and no leakage in the intestinal wound.

This method of excision was in part described by me in July, 1887, at the meeting of the Mississippi Valley Medical Association, held at Crab Orchard Springs, Kentucky.—*Journal American Medical Association*.

ARREST OF HEMORRHAGE FROM WOUNDS OF THE PALM OF THE HAND.

—(R. J. Levis, M. D., Philadelphia.)—My experience with hemorrhage from wounds of the palmar arches is, that it is usually controllable by maintaining extreme elevation of the hand. This is most thoroughly effected, and with the least discomfort to the patient, by vertical suspension of the limb, the attachment being made along the palmar and dorsal surfaces of the forearm by adhesive strips, after the ordinary manner of making extension in the treatment of fractures. A cord from the adhesive straps may be fastened to the

top of a bed-post or other convenient elevated point.

If posture alone should not arrest the hemorrhage, the most effective compression can be made by placing in the palm of the hand an india-rubber ball, or a ball solidly made of cotton wadding, and on this the fingers and thumb should be closed and bound tightly with a roller handage.

Under these expedients, I have never been obliged to ligate arterial trunks for the arrest of hemorrhage from the palm of the hand.—*Med. and Surg. Reporter*.—*Columbus Medical Journal*.

THE PEORIA MEDICAL MONTHLY.

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EDITORIAL.

MISSISSIPPI VALLEY MEDICAL ASSOCIATION.

Elsewhere in this issue we print a letter from the Chairman of the Committee of Arrangements of the Mississippi Valley Medical Association, Dr. I. N. Love, of St. Louis, inviting all physicians of the west to attend the coming meeting of that society in St. Louis in September. We believe to a large number of physicians the time of meeting, being in September, will prove a great inducement to attend, and that the number present will be largely in excess of any previous meeting.

Illinois physicians are especially invited to be present and should respond in goodly numbers. After the heat of the summer doctors should take a rest,

if only a short one, and we know of no better way than to attend the always profitable sessions of this association, and at the same time find pleasure and relaxation in the Exposition and Carnival for which St. Louis is so justly noted.

All are invited to bring their wives along, who will be entertained handsomely during the business meetings of the association.

We hope 500 Illinois doctors will attend and come home full of a determination to make their own State Society an equal success at Jacksonville next May.

MISSISSIPPI VALLEY MEDICAL ASSOCIATION.

The Mississippi Valley Medical Association will meet at St. Louis, Sept. 11, 12 and 13, 1888.

Dudley S. Reynolds, A. M., M. D., Louisville, president; John L. Gray, M. D., Chicago, Ill., secretary.

Office Chairman Committee of Arrangements, Lindell and Grand Avenues, St. Louis, Mo., July 19, 1888.

To the Medical Profession of the Mississippi Valley:

That there should be a thorough appreciation on the part of the profession —of the mutual interests of medical men in the states of the west and south can not be questioned. Engaged as they are in the management of diseases peculiar to their section, realizing the value of an

exchange of ideas between workmen in the same calling and field, the doctors of this great valley should at once step to the front and join earnestly in an effort to organize, and crystalize the scattered segments of the profession into a strong and harmonious whole.

Knowing as we do that the seat of empire of our country socially, commercially and politically has removed from the eastern shore, is not the time ripe for accomplishing the same change in the medical profession? Shall not "Westward the star of empire" of our profession take its way?

Recognizing the truths of the foregoing propositions and in earnest thereof, we, the undersigned, cordially invite all members of the profession in the states west of the Alleghanies to meet in St. Louis, Tuesday, September 11, 12 and 13, and become members of the Mississippi Valley Medical Association.

We append hereto a copy of the constitution and by-laws of the society.

A good programme is being arranged with a full supply of able papers and interesting discussions.

This is the most desirable time to visit St. Louis, it being during the great exposition and carnival season. All the doctors should bring their wives and families, as there will be ample enjoyments for the latter while the meetings of the society are in progress.

Liberal arrangements will be secured from the various railroad and telegraph companies.

We trust that every member of the profession, eligible, will consider himself and family most cordially invited to St. Louis at the time above mentioned. Please address the Chairman of Committee of Arrangements for further information. Procure from your local ticket agents a receipt for full fare paid.

Committee of Arrangements, H. Tuholiske, Y. H. Bond, Frank R. Fry, R. M. King, A. H. Meisenbach, H. H. Mudd, Josephus R. Lemen, H. C.

Dalton, Spencer Graves, A. H. Ohmann-Dumesnil, Robert L. Thomson. I. N. Love, Chairman.

CONSTITUTION AND BY-LAWS OF THE MISSISSIPPI VALLEY MEDICAL ASSOCIATION.

NAME.

Article I. This Association shall be known as the Mississippi Valley Medical Association.

Article II. The objects of this Association are to foster, advance and disseminate medical knowledge; to uphold the honor and maintain the dignity of the Medical Profession.

MEMBERSHIP.

Article III. Membership in this Association shall be limited to those members of the profession of medicine who acknowledge allegiance to the American Medical Association by signing its code of ethics. No individual who shall be under sentence of expulsion, suspension or disability from any recognized state, county, district or local medical society, shall be eligible to membership in this Association until said disability shall be removed. All applications for membership shall be referred to the Committee on Credentials. The annual dues shall be \$3. in advance.

METINGS.

Article IV. The regular meeting of this Association shall be held annually. The place, with the time of meeting for each successive year, shall be determined by vote of the Association.

OFFICERS.

Article V. The officers of this Association shall be a President, two Vice-Presidents, a permanent Secretary, Treasurer, an Executive Committee, consisting of the President, Vice-Presidents, Permanent Secretary, Treasurer and Chairman of the Committee of Arrangements; a Committee on Credentials, consisting of five members, who may call to their assistance one member from each state represented at the meetings; a Judicial Council, consisting of seven members, three of whom shall serve one year and four for two years, alternately. A Committee on Nominations, which shall consist of one member from each state represented, shall be selected by the President on the second day of each annual meeting. It shall meet and nominate officers for the ensuing year, all of whom shall be elected on the last day of the annual meeting.

DUTIES OF OFFICERS—PRESIDENT.

The President shall preside at the meetings of the Association, and perform such other duties as parliamentary usage and the vote of the society may require.

VICE-PRESIDENT.

The Senior Vice-President, or in his absence a Junior Vice-President, shall assist the President in the performance of his duties, and, in the absence of the latter, or at his request, shall officiate in his place.

PERMANENT SECRETARY.

It shall be the duty of the Secretary to keep a list of the members of this Association, with their addresses, to give notice of the meetings of the Association, to keep a record of its proceedings, to conduct its business correspondence, and perform such other duties as may be required.

ASSISTANT SECRETARY.

It shall be the duty of the Assistant Secretary to assist the Secretary in the performance of his duties, and, in the absence of the latter, those duties shall devolve upon him.

TREASURER.

It shall be the duty of the Treasurer to receive and disburse all moneys belonging to the Association. He shall pay out no money except on warrants signed by the presiding officer.

COMMITTEE OF ARRANGEMENTS.

The Chairman of the Committee of Arrangements may choose as many assistants as he may deem best, and appoint an assistant secretary, besides making all arrangements for the annual meetings.

CHANGES IN THE CONSTITUTION.

Article VI. This Constitution shall not be altered or amended except the proposed alteration or amendment be first read on two consecutive days of a regular annual session of the Association and receive the approval of a three-fourths vote of all the members present.

By-LAWS.

ARTICLE I.

The annual session shall be called to order by the Chairman of the Committee of Arrangements. The President on taking the Chair shall call for the reading of the minutes of the previous meeting, and on the morning of each succeeding day of the annual sessions the follow-

ing order of business shall be observed after the reading of the minutes:

1. Announcements of the Committee of Arrangements.

2. Report of the Secretary.

3. Communications from other societies.

4. Reports of committees. They shall be called in the following order: Committee on Credentials, Executive Committee, Judicial Council, Committee on Nominations during the morning session of the last day only.

ARTICLE II.

1. The provisions of Article I of the By-Laws shall apply to the first thirty minutes of each morning session.

2. No essay or report shall be permitted to occupy more than twenty minutes without consent of the committee of arrangements.

3. Discussion of reports and papers presented shall be limited to ten minutes for each speaker, and no member shall speak a second time except with the unanimous consent of the Association.

4. No essay, report or other communication presented to this Association shall be published in any but the regular medical journals without the consent of the Executive Committee.

5. All questions of debate shall be decided in accordance with Cushing's Manual of parliamentary laws.

ARTICLE III.

1. All questions of ethics and differences between members shall be referred without debate to the Judicial Council, whose report shall be final.

2. All questions of eligibility for membership shall be determined by the Committee on Credential.

3. No person shall be allowed to participate in the deliberations of this Association who has not registered as a member and paid all dues.

ARTICLE IV.

These By-Laws may be amended by a two-thirds vote of all the members present, provided the proposed amendment shall be made in writing and read aloud to the Association on two consecutive days at any annual meeting.

DR. KARL KILCHER, of Prague, assistant to Professor Hlawa, has just succumbed to the effects of an exceedingly repugnant experiment. He

swallowed some blood of a man who had died of typhus fever, and death was caused by septicemia.

PERISCOPE.

THE USE OF BICHLORIDE OF MERCURY IN GONORRHOEA.—In 1887, Dr. George E. Brewer detailed at some length the results of the treatment of one hundred and fifty cases of gonorrhœa by the use of mild solutions of bichloride in the urethra by the continuous irrigation and hot retrojection.

In the acute cases the distinction was made between the specific or gonorrhœa form of urethritis and the non-specific or simple variety, and in each of these classes, as well as in chronic cases, the success of treatment was noted. At the close of the paper the following conclusions were drawn:

First.—That in uncomplicated cases of acute gonorrhœa urethritis, treated by prolonged and frequent irrigation with bichloride of mercury, recovery may be expected within two weeks. That this period may be considerably shortened by the early inauguration of treatment, by absolute rest, and by avoidance of stimulants. That it may be indefinitely prolonged by irregularity of treatment, by inordinate physical exertion, and by indulgence in alcoholic and venereal excesses.

Second.—That the retrojection of a hot solution of bichloride possesses all the advantages of the former procedure, and in addition causes a more rapid subsidence of the inflammatory symptoms, a greater feeling of comfort to the patient, and is attended with less annoyance and trouble.

Third.—That in cases of acute non-specific urethritis the favorable influence of each of these methods is strikingly apparent.

Fourth.—That in cases of chronic purulent urethritis, no agent produces such rapid and permanent improvement as irrigation, especially when combined with astringents and heat.

Fifth.—That the percentage of complications occurring in cases treated by these methods is far below that ob-

served when the ordinary treatment is employed.

Since then he states in the *Journal of Cutaneous and Genito-Urinary Diseases* for July, 1888, that he has records of one hundred and two additional cases of urethritis treated by these methods, the results being apparently more satisfactory even than the first series, and apparently fully justifying his conclusions. In the first series of cases the average duration of treatment to the cessation of all discharge was seventeen and a half days, while in his last it was reduced to thirteen days. Inflammatory complications were rare, occurring but five times in two hundred and fifty cases. Of these, three were cases of epididymitis, one of cystitis, and one of prostatitis; while in three hundred and fifty-two cases treated by other methods, epididymitis alone occurred in sixteen per cent. of the patients,

Hot retrojection has proved a most valuable procedure in the treatment of chronic urethral discharges. Eight cases, in which the discharge had persisted for several months, were relieved after one treatment.

Cases are occasionally encountered, however, which will not yield to these methods. In all such the urethra is found to be the seat of one or more strictures, which render its walls rigid and inelastic, thereby preventing the free circulation of the fluid within its cavity.—*The Therapeutic Gazette.*

THE BORACIC-ACID-LEUCORRHœA-TREATMENT.—Dr. N. F. Schwartz of St. Louis has claimed remarkable results in the treatment of leucorrhœa from the use of boracic acid. The method advocated by Dr. Schwartz is that followed in otitis media purulenta, and it was the success in its use in the latter disease which led him to try boracic acid in leucorrhœa. He first irri-

gates the vagina with water as hot as can be borne, then a speculum is introduced and the vaginal walls are carefully dried with absorbent cotton pledges. Sufficient boracic acid is poured through a cylindrical glass speculum to completely distend the vaginal vault and surround the cervico-vaginal portion.

Dr. H. N. Moyer, who has tried Dr. Schwartz's procedure with success, greatly prefers the larger crystals, as they dissolve slowly, and the effect is more prolonged. The crystals are held firmly in place by small absorbent cotton tampons supported by a large aseptic wool tampon.

The treatment was tried by myself in three cases, and in all with good results. The first case was that of a twenty-two year old neurasthenic woman whose general health had become

much impaired. She suffered, at the time I saw her, from various imperative conceptions, prominent among which were those of mysophobia. She was the victim of a bad heredity and exhaustion from physical disease. She was treated with cold baths and general tonics, since for moral reasons it was deemed advisable to desist from any treatment of the reproductive apparatus until her general health and mental condition had greatly improved. The patient's will-power was strengthened and her general health had greatly improved when she complained of a profuse leucorrhœa, which on examination was found to be due to endometritis. I thrice packed her vagina with boracic acid, in the manner already indicated by Dr. Schwartz. After the second packing a hardening of the cervix was noticeable, which was still more

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Lambert Pharmacal Co., 314 N. Main St., St. Louis

marked after the third. She recovered without any apparent untoward results from her leucorrhœa.

The second case was that of a married woman who suffered from leucorrhœa dependent on endometritis. The discharge became profuse after menstruation or unusual exertion. After the third packing I noticed that the cervix, which had been denuded of epithelium, had a line of healing about a quarter of an inch wide and was decidedly hardened. After the fourth and last packing the cervix was still somewhat hardened, but the leucorrhœa had entirely ceased.

How long this hardening persists after the boracic acid treatment I am unable to state, as since recovery from leucorrhœa I have not had the opportunity of examining either case. All three patients made a good recovery from leucorrhœa and were pleased with the treatment. Since this hardening of the cervix has not been discussed in connection with the boracic acid treatment, I have thought it of sufficient interest to merit mention.—*Medical Standard.*

A VALUABLE FORMULA IN MENSTRUAL IRREGULARITIES.—Menorrhagia, metrorrhagia, dysmenorrhea and amenorrhea are terms designating uterine conditions, common, yet often very intractable, exhausting the strength of the patience of the physician in their persistency.

If thoughtfully considered, these conditions are quite amenable to treatment in nearly every case.

Mrs. S., always regular in time and quantity of menstrual flow, was obliged to do a prodigious amount of work in the care of her only sister to whom she was very much attached, and who had been taken suddenly and dangerously ill. The over-work, coupled

with with the anxiety and sorrow at the sudden death of the sister, brought on a metrorrhagia which seemed uncontrollable. The menses were excessive, amounting to flooding, continued from eight to ten days, then ceased for a week to return with increased severity. Ergot, erigeron, cinnamon, alum, gallic, acid and other astringent measures did not produce an impression upon the disorder. The patient became exhausted and anemic. The following prescription was finally advised and the patient was kept quietly in bed for one week:

R. Fl. ext. cenecio aurens.
Fl. ext. aletria farinosa, 3 drachms.
Fl. ext. cimicifuga racemosa.
Fl. ext. viburnum prunifolium, 5 drachms.
M Sig.—Ten drops in water every three hours.

The flow soon ceased and did not return for a month. Then in proper quantity and time and has since been very regular.

The above prescription seems to act more readily where the disturbance is of nervous origin, or is a result of nerve exhaustion.

In dysmenorrhea, gelsemium has been added in place of cimicifuga, and very excellent results obtained. In ameorrhœa the prescription may be accompanied or alternated with iron in some form. In sub-involution, following confinement, the combination produces excellent results. In many cases it must be persisted in as it may not effect a cure immediately, but it is generally prompt and satisfactory in its action. In old standing cases of "falling of the womb," the pain and distress, the back-ache and dragging sensations will be quickly relieved by this combination. The writer has used it for several years with excellent results and speaks from wide experience. The remedies are unpleasant of administration, but the smallness of the dose commends it to the physician.—*Chicago Medical Times.*

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ORIGINAL COMMUNICATIONS.

*CONJUNCTIVITIS.

BY H. M. HARRISON, M. D., BUSHNELL, ILL.

GENTLEMEN: I present this subject for your consideration, from the fact that it is the most frequent disease of the eye met with in practice and often treated in an unsatisfactory routine manner.

I desire, therefore, briefly to invite your attention to the most practical points in the diagnosis and treatment of the various forms of conjunctival inflammations.

Before doing so we must select a descriptive classification, under which to group the various forms of conjunctivitis.

The following seems the most rational and practical, Hyperæmic, Muco-Purulent, Purulent, Granular and Phlyctenular or Pustular.

Although it is sometimes difficult, in the first three named in this classification, to definitely draw the line of demarcation between the commencement of one form and the termination of that preceding it; as the muco-purulent is always preceded by the hyperæmic, and the purulent by both the hyperæmic and muco-purulent, yet practically the distinction becomes natural and useful.

The symptoms of the remaining forms are more distinctly marked, and can readily be distinguished, one from the other, as well as from the preceding ones named.

Hyperæmic, or as it is sometimes denominated, simple conjunctivitis, may be characterized, baring the presence of a foreign or irritating substance in the eye, by the following symptoms:

There is more or less discomfort about the eye, except it be in some aged person where there is a considerable relaxation of the tissues, as if some grit or sand had fallen into it.

Also there is a slight intollerance of bright light, with an unusual weariness and irritation induced by any immoderate use of the eyes.

The secretions from the lachrymal and conjunctival glands are increased, but not changed in their character, and for that reason the disease is non-contagious.

On everting the lids we find the palpebral surface presenting not only an infected, but a roughened appearance, especially at the tarso-orbital fold, due to the prominence of the villi and glands.

*Read before the Military Tract Medical Association, at Peoria Ill., May 10, 1888.

The lids, caruncle and semilunar folds are generally somewhat swollen, whilst the ocular conjunctiva is only slightly involved, as seen by the few congested superficial vessels, pursuing a reticulated course over the sclerotic towards the cornea.

In the treatment of this form of conjunctivitis it is of the utmost importance to look carefully for, and remove if possible, all the causes that are instrumental in its production.

For hyperæmic inflammation of the conjunctiva frequently appears as a secondary condition, resulting from an inflammation of some of the contiguous structures, as of the nose and lachrymal passage, and will frequently subside only with the abatement of the primary affection.

It may also be produced by *eye strain* where there are abnormal refractive conditions, such as hypermetropia, astigmatism, or insufficiency of some of the recti muscles, and any of these defects *must* be overcome by *properly selected glasses* before we can expect permanent benefit from any line of treatment.

After the elimination of the above causative factors the treatment consists in giving the eyes *rest*, protecting them from the bright light by neutral tinted glasses, and the use of *mild* collyriums; such as ten grains of borax or boracic acid to the ounce of camphor water, a few drops of which should be instilled into the eye three or four times a day.

Muco-purulent or as frequently called catarrhal conjunctivitis, may be considered as an aggravated form of hyperæmic conjunctivitis, and in the early

stages presents about the same symptoms.

But as the disease advances these symptoms become more intensified. The palpebral surface of conjunctiva assumes a velvety appearance, and the ocular conjunctiva is more involved in the congestion, so much so that sometimes it becomes oedematous, from the infiltration of the submucous tissue and even overlaps the margin of the cornea.

The discharge becomes muco-purulent in character, and is usually seen collected in whitish flakes, floating about in the tears, and possesses all the elements of contagion.

Also the meibomian glands becomes involved in the irritation going on around them and they take on a perverted action that glues the edges of the lids together during sleep.

This form is, fortunately, the one most frequently met with, prevailing as it does, sporadically and epidemically, and yields readily to proper treatment; yet, if not so treated, it may become a chronic hyperæmia, or merge into the purulent form.

In the treatment of this form of conjunctivitis our first duty is to seek for and remove, if possible, the cause of the disease; which can be more easily done where it depends upon some local irritation, than when due to filth, foul air and exposure.

We should also *never overlook* the fact of its contagiousness, and endeavor by scrupulous cleanliness and isolation to prevent the further spread of the disease.

The state of the patient's general health should be carefully looked after, to see that the organs of secretion are

performing their proper functions; as, oftentimes a blue pill, saline cathartic or diuretic, does wonders in relieving the intensity of the congestion.

Do not make the grievous mistake, so often made, of prescribing astringent colyriums in the early stage of the disease, but protect the eyes, as far as possible, from all sources of irritation, thereby using the first principle in the treatment of inflammations—*rest*.

However, should the patient suffer from much ciliary pain and irritability of the eyes, it will be found useful and grateful, to use hot fomentations, for an hour or two at a time, three or four times a day, and afterwards apply ext. of belladonna freely to the lids.

When the irritation has subsided and the discharge assumed a muco-purulent appearance, then we may use our astringents; such as, one grain of sulph. of zinc with four or five grains of boracic acid to the ounce of water, or other similar combinations.

But if the discharge becomes very profuse two or more grains of nitrate of silver to the ounce of water becomes the more efficient remedy, with cold compresses applied to the closed lids for a while after each application.

In addition to the above, it is always advisable to smear a little vaseline along the free margin of the lids at bed time, so as to prevent them from sticking together during sleep and retaining the discharges.

PURULENT CONJUNCTIVITIS.

This is the most formidable variety of conjunctivitis, and varies much in intensity in different individuals and in different localities.

It is also more destructive in its rav-

ages among the poor and ill-fed, and in those whose constitutions have been impaired by previous disease or age.

The virulence of this form seems to depend upon the effect of overcrowding, incident to garrisons of troops or large public institutions.

It is seldom met with in general or country practice, save as the result of a direct inoculation from an isolated case, gonorrhreal virus, unhealthy vaginal secretions, supervention upon catarrhal conjunctivitis, which has been harshly treated, or where the patient has been exposed to great vicissitudes of weather.

Its initial inflammatory symptoms resemble, in a measure, those of the muco-purulent, but often speedily assumes a far more serious aspect, becoming violent and destructive, as well as highly contagious.

The abruptness of this disease is marked by the addition to the initial symptoms of great intolerance of light and pain.

In fact, when suffering from a severe attack, the physiognomy of the patient frequently indicates the disease, he having to be led by a companion, being unable to see, the lids greatly swollen and sometimes everted, their margins a scarlet color, and pus oozing from between them.

The whole palpebral, ocular conjunctiva, and subjacent cellular tissue becomes turgid and infiltrated; so much so that we may have great sloughing or ulceration of the cornea from its impaired nutrition and constant contact of the virulent secretions.

We can not, therefore, be too careful in examining the eye of a patient

suffering from this disease, to note the condition of the cornea, for, should there be a general haze, or as more frequently seen, patches of gray infiltration, we may anticipate and try to thwart a necrotic action.

There may be considerable difficulty experienced in making an examination on account of the swelling of the lids, chemosis of the conjunctiva encircling and partly covering the cornea, and the involuntary resistance of the patient.

But by gentle manipulation avoiding undue and dangerous pressure upon the globe this can be sufficiently overcome to permit us to obtain a proper comprehension of the case.

As regards treatment, the first thing to be attended to is seclusion of the patient, as far as practicable, from contact with others, and absolute cleanliness, everything that is brought in contact with the secretions being burned or cleaned at a high temperature, so as to destroy every germ of contagium.

When only one eye is affected the other should be securely protected from contagion by being carefully covered with some impervious dressing.

The copious discharge should be frequently removed by absorbent cotton or soft rags.

During the acute stage a ten-grain solution of boracic acid should be frequently instilled into the eye, and if the secretions are abundant, a one or two grain solution of the sulph. of zinc may be used three times a day.

If there be great œdema of the lids and a kindred escape of the purulent secretions we may use the boracic acid solution with a small syringe or medi-

cine dropper, introduced beneath the swollen lid; care being exercised that the cornea is not injured by the point and that none of the reflex injection enters the attendant's eyes.

Compresses kept cold by ice and frequently changed, may be applied to the eye, if grateful to the patient.

If there be severe pain, especially at night, sedatives sufficient to control it should be used.

Cathartics, by reason of their derivative influence, are often indicated, but overpurgation should be avoided.

Many cases require tonics, more especially during the latter stages.

Should the chemosed ring around the cornea be so great as to endanger its nutrition, we may incise it in radiating lines, down to the sclera.

If the tension of lids be extreme, causing a good deal of pain and threatening injury to the cornea, by reason of pressure, the outer commissure should be divided and kept from uniting as long as necessary by pulling it apart frequently.

Pilocarpine and eserine are valuable remedies when the nutrition of the cornea is treated, or ulceration has actually begun; by reason of its diminishing the intra-ocular tension, and their influence over the general inflammation.

Poultices should be avoided in all forms of conjunctivitis, but more especially in this form, as long as there is any hope of saving the eye, as by their macerating effect they help to disorganize the cornea.

Also acetate of lead should be excluded from ocular therapeutics, for whenever there is an abrasion of the

cornea, there is a liability of its being decomposed and deposited at an indelible opacity.

In some cases where the copiousness and purulence of the discharges is a marked feature, a two-grain solution of the nitrate of silver seems to exert the best effect of any of the astringents.

But the plan of using the solution strong enough to produce a caustic effect, as done by some, in cases of specific origin, has been proven to be of doubtful efficacy.

Should the case pursue a more unfavorable course, and destruction of the eye be inevitable, as when the cornea is destroyed—then poultices may be used to hasten the evacuation of the sloughy mass, or better the patient etherized, and the whole gangrenous mass scooped out, leaving only the sclera; thereby lessening the chances of purulent infection.

When the disease has pursued the more favorable course, and the purulent discharge has ceased, the treatment may be terminated by the occasional application of a crayon of copper sulphate with a colyrium of zinc sulphate, one to four grains to the ounce; which will hasten the progress of the case and remove the sequela of the disease.

Do not forget the danger of the disease relapsing, by discharging the case before every vestige of the disease is removed.

Granular conjunctivitis may be described under two heads, the acute and chronic, the latter being the form which is the most frequently met with in practice.

It is in the majority of cases a complication or sequela of some of the acute forms of conjunctivitis; yet it does not occur as a primary disease.

This form of conjunctivitis depends upon the presence of numerous deposits in the lymphoid spaces of the conjunctiva, of small, firm neoplastic exudations, or granular bodies; which are found more numerous at the tarso-orbital folds.

These deposits project more and more above the surface of the lid, and are the source of a constant frictional irritation of the cornea, that may result in ulceration or a vascularized opacity of it.

They also tend to multiply indefinitely, and where the case has been neglected, or improperly treated, produce great deformity of the lids by transforming the normal conjunctiva into connective, or cicatricial tissue.

The symptoms as presented in most cases when seen, depend upon the acuteness of the attack, there being more or less lachrymation, muco-purulent discharge and uneasiness about the eyes.

The main diagnostic symptoms for its identification, being the discovery of the minute bodies, looking like millet seeds, imbedded in the mucous membrane.

In the treatment of granular conjunctivitis, especially of the acute variety, we must remember that a certain degree of inflammation has a curative tendency, and as long as the cornea remains free from implication, the disease may be allowed to run its course; simply keeping the eyes cleansed by a

mild colyrium of boracic acid, as given before.

Should the irritation going on in the eye be excessive, the patient should be confined in a dark room and treated on general principles as in the other forms of conjunctivitis.

The treatment of the more chronic forms of this disease, or where the inflammation is not sufficient to induce a spontaneous cure, resolves itself into one of two plans; the use of stimulating remedies to promote absorption, or the radical cure by neucleation of the trachomatous bodies.

The former may be safely accomplished, by using the combined solution of the sulphates, or the time-honored crayon of sulphate of copper, applied as frequently as the status of the case may indicate, combined with the use of a colyrium of one to four grains of sulphate of zinc to the ounce of water, a few drops of which, should be put into the eye three or four times a day.

This, however, is usually a slow and tedious process, being almost beyond the endurance of the patient, and even the physician, in some of these cases. Where there is a marked pannus to protect the cornea, we have an excellent and efficient remedy in the jequirity bean.

The use of this has been discouraged by many of late, on the grounds of some disastrous results incurred, no doubt, by its abusive use in improper cases; as it was heralded forth by the journals, like many other good remedies, without the proper admonition of danger.

As a safeguard, do not use an infusion stronger than one per cent, and

commence using it after standing twenty-four hours to cultivate the bacteria, by applying it to the everted lid every six or twelve hours until a sufficient grade of inflammation is established; throw away that infusion, and await results before using any more.

The enucleation of the trachomatous bodies is called the radical treatment, and is the most rapid and efficient means we possess of curing granular conjunctivitis.

The operation consists in everting both lids well, applying a strong solution of cocaine to appease the pain, seizing the folds of the conjunctiva with a smooth pair of curved forceps, and stripping out all of the gelatinous granulations.

To complete the cure, after the trachomatous bodies have been thoroughly squeezed out, a solution of ten to twenty grains of quinine in one ounce of glycerine should be applied, with a camel's hair brush, to the everted lid every morning, and an ointment of four to eight grains of the yellow oxide of mercury to the ounce of vaseline, applied with a probe to the lower lid every evening just before retiring.

Excision of the retro-tarsal fold has been advocated, but should only meet condemnation as a method of mutilation; for there is liable to be, even with the most conservative treatment, cicatricial contraction, with all its crippling effect to the eye.

Phlyctenular or pustular conjunctivitis is met with more frequently in children, although older persons may also suffer from it.

The characteristic features of simple phlyctenular conjunctivitis are the form-

ation of one or several small papules or vesicles, generally situated near the corneal margin.

The vesicles are raised above the surrounding surface, giving rise to the sensation of a foreign body in the eye, more or less smarting or itching, some intolerance of light and increased lachrymation.

After a time a small yellowish pustule may form at the summit of the vesicle, and rupture, leaving a depression to mark its location.

A fasiculus of vessels extends to, or surrounds the vesicle; but the injection does not involve other portions of the conjunctiva.

The tendency of the disease is towards a spontaneous cure in a week or ten days, unless too actively treated, or in cases where there is a depraved condition of the system.

In some cases, however, the disease does not pursue or assume this mild and favorable course, but begins as a pustular or herpetic form, accompanied frequently by the same eruption upon the skin, and both eyes are generally involved.

The vesicles are located upon the cornea, and small ulcers may follow them, exposing the terminal branches of the nerve, producing considerable ciliary pain, great intolerance of light and spasm of the lids; so much so that it will be impossible to make an ex-

amination of the eyes, except by forcible means, cocaine or an anesthetic.

The treatment of the mild form is very simple, the essential point being *not to use harsh treatment.*

The eyes should be protected from the bright light by tinted glasses, to permit plenty of outdoor exercise, and a soothing colyrium of eight to ten grains of borax to the ounce of camphor water instilled into the eye three or four times a day.

In the treatment of the severer form we may add to the above a liberal diet, and constitutional, such as cod liver oil, iodide of iron and arsenic, according to the indications.

As additional local treatment may be added a two to four grains solution of nitrate of pilocarpine, of which a drop or two should be instilled into the eye three times a day; this often giving great relief to the photophobia and spasm of the lids.

Should the disease, after the acute stage has passed, assume a sluggish condition the dusting of a little calomel into the eye once a day often serves a good purpose.

The use of sulphate of atropia is strongly recommended by some authors, but owing to the dilatation of the pupil, with the increased intolerance of light and the conjunctivitis, it sometimes excites, I have been led to discard its use in these cases.

ONCE again we suggest what in all reason seems to be sound advice. The active, energizing season of cool nights and pleasant days is here. This energy manifests itself in different ways according to individual temperament. Society, science, art, literature are each

taken up with new energy. The medical man is no exception to this rule. He naturally seeks to widen his knowledge and practice, and to do this he cannot do better than subscribe for THE PEORIA MEDICAL MONTHLY.

*** TYPHOID FEVER.**

BY J. P. WALKER, M. D., MASON CITY, ILL.

In writing as ordered on the subject of "Typhoid Fever," it is superfluous for me to detail the history, causation, pathological conditions, semiology and general hygienics, dietetics and therapeutics which have been so much better described by our great authors whose elaborate studies are found on all of our bookshelves, than could be done by me, though I should write hundreds of pages on this topic.

Therefore, I shall confine myself to a few points, which occur to me, that seem to be worthy of our present and future considerations:

1. The peculiar manner of the incurrence of typhoid fever in central Illinois.
2. The insidious mode of the approach of the disease in many cases, and
3. Some special medication in some cases.

Until 1852 we knew nothing of typhoid fever in this region, except what we had read of the discussions on the subject which was so bitterly carried on between the British and French medical men. The British contending there could be only one continued fever, while the French argued with better ground, that typhus and typhoid fevers were distinct diseases as shown by the dissections of Bretaneau, Cherubielheir, Roederer, Morgahni and many other equally distinguished investigators. Murchison seems to have been the first British author who was able to convince his countrymen that ty-

phoid fever was an entity. Grudgingly he gave the praise of his convictions to Gerhard and Pennock, two of *our own American physicians*.

In the early part of 1853 a new fever broke out amongst the most wealthy families of northwest Sangamon, southeast Case, southwest Menard and northeast Morgan Counties, carrying consternation and death over all of that notable stock-raising region. A great majority of the fatalities chose the brightest hopes of the country, boys and girls, young men and women from fourteen to thirty years of age.

I saw in November, 1853, quite a number of these cases. Some during the first week, some in the second and third weeks, and others in convalescence, and three in articulo mortis. Nearly every doctor had a name of his own for this affection.

The malady was named typhus, euteric, spotted, continued and nervous fevers.

In all these cases there existed a decided malarious, or remittant feature which was generally overlooked. I came to the conclusion that the disease was caused by impurity of the water supply. These cattle feeders had for years kept their stock near their residences, the wash and offal accumulating had finally reached the stratum of sand carrying the water by percolation through the joint clay.

Thus about the same time a great stock raising region was in a fit condition to start the disease *de novo*, or

which would now seem more probable, to favor the spread of typhoid if it had been imported.

At the same time small farmers who lived isolated were only effected with ordinary fevers.

I have since observed, that typhoid fever frequently attacks families living near old feed lots, especially when there is a possibility of the moisture from these lots to gain access to the water supply of the family.

In the later months of 1853, the cases of fever on some of the older farms in Mason and northeast Menard Counties took on some typhoid signs. Early in 1854 nearly every case of fever that came under my observation, occurring on the cattle farms, assumed a typhoid character. Early in September of 1854 typhoid fever became general in northeastern Menard and southeastern Mason Counties.

The fatalities were mostly caused by pneumonia, intercurring from the fourth to the twenty-fifth day, with some cases of intestinal hemorrhage, but no fatalities from this cause.

I met more cases of carbuncle during the years 1854-5 and 6, following typhoid fever cases, than in all those that I have seen since. Many continued to suffer with great "boils," as they called them, for months after the fever subsided.

I believe that, in many cases, if the disease is diagnosed within the first week, it *may* be aborted. But when one has only malaise, he will go about his business for a week or ten days scarcely knowing that he is sick. In such a case, if you succeed in keeping him up, you don't call it typhoid fever.

If you do, the country laughs at you. Many of these cases of "walking typhoid fever," if neglected, terminate badly, perforation and hemorrhage occurring in mild in as great a percentage as in the more severe attacks.

The indications for medication are, in most cases, very simple, after proper arrangements for cleanliness, ventilation and diet, have been secured.

The action of the bowels should be closely observed. Whenever any accumulation is suspected, they should be gently moved by oleum ricini with oleum terebintheni. If they move too often, quiet them with ipecachuanas, opii and oleum terebintheni. When restless, bromides with morphia at night. Keep the fever within bounds with sodii salicylate, aconite, verat, virdi, anti-febrin, etc. I generally give hg. chl. mite three or four times a week in small doses at night. Allow from four to six hours' rest every night. Sponge the body every day. Constant nourishment, with stimulants, in the later stages.

In all of my experience from 1853 to this day, I have observed that whenever malarious signs have been overlooked or disregarded, death, generally, was the result. Especially was this notable in the late war. The eastern surgeons would not be convinced that two fevers could exist in one patient, nor that typhoid poison and malaria could so be combined as to make what came to be called "typho-malarial fever." They therefore lost most of their cases at Cairo and Louisville from 1861 to late in '62.

I was convinced at first that the malarial character of this disease *must* be

kept in abeyance, from first to last, and after the typhoid signs had all subsided.

Quinia was used freely to meet this indication. But in many cases it increased the nervousness, delirium, diarrhoe and tympanitis, so that many practitioners of my acquaintance would not use it in any case, to their sorrow and final disgrace. In such cases, I very soon tried Fowler's solution, early and late. This addition to the general treatment proved so satisfactory to me that I have later on prescribed it in nearly all my cases, with increasing confidence. This remedy I found peculiarly beneficial in hospital and field practice during the late war.

I have not seen a fatal case of typhoid fever in several years.

I never use quinia and alcohol as antipyretics!! Have used sulpho-car-

bolate of sodium without benefit!! I use alcohol as nourishment with milk, eggs, etc.

I believe that arsenic is the very best and by far the safest antiperiodic that has yet been found in this form of fever. I am further satisfied that it prevents the ulceration maturing, as I have never lost a case of typhoid fever from hemorrhage or perforation when this remedy has been freely used.

The remedy is gradually coming in use in the east, as Pepper cautiously recommends it.

If you can keep your patients clear of the remittent tendencies, reduce the evening temperature and feed them plenty of nourishing food that can be assimilated, they will nearly all come out all right in from three to four weeks, unless pneumonia should incur.

HOW TO TREAT NASO-PHARYNGEAL CATARRH.

BY N. R. GORDON, M. D., SPRINGFIELD, ILL.,

Fellow of American Rhinological Association.

It seems, that a disease which is so uniformly prevalent as naso-pharyngeal catarrh, should have some well recognized method of treatment.

Intermittent fever, dysentery and other diseases of frequent occurrence, have some general form of treatment, which, according to experience, is considered the orthodox treatment; this observation is as true of the common catarrhal affections of the nose and throat, as it is of intermittent fever and dysentery.

The diversified methods of treatment adopted by the profession, indicate they are not a unit upon this

question, and the unanimous verdict of the public, upon whom these different methods are practiced, is, that it is a failure and not worth the money it costs. Some physicians recommend a treatment with hesitation and doubt, but are careful not to use it upon themselves. This causes the patient to distrust the competency of the physician, and the former feels that he has been forsaken, and wisely concludes that treatment is useless, which of course it is, under the circumstances.

Heretofore, the methods of treatment used, were based upon erroneous conceptions of the character of the disease;

hence the many failures. A form of treatment that yields good results in at least 95 per cent of the cases treated may be regarded as eminently successful; such is my success, extending over many years.

The etiology and pathology of the disease, we will omit, and speak, in this paper, of the two forms of catarrh and their treatment.

In the hypertrophic form of catarrh, there is the so-called inflammation, with thickening of the mucous membrane, increased sensibility, the secretion is profuse, semi-transparent or purulent, and tenacious, and sometimes more or less pain.

The first thing necessary is to cleanse the parts of the adherent mucus, examining from time to time with the rhinoscope to ascertain if the surfaces are thoroughly cleansed. For this purpose, if the mucus is not too tenacious, I use the mixture which is used for the medication. Very tenacious mucus is removed by spraying a limited amount of the following solution at blood heat upon the surface covered:

R. Sodium chloride	$\frac{1}{2}$ drachm	
Sodium bi-carbonate	$\frac{1}{2}$ drachm	
Glycerine	3 drachms	
Listerine	4 drachms	
Aq.	q. s. ad.	4 ounces

It is important this cleansing must be done carefully with as little irritation as possible. It should be sprayed up behind the soft palate and anteriorly into the nose. The patient should not gag or retch from the use of the instrument or remedies.

If the parts can be cleansed without the use of the cleansing solution, it is best to do so. In such cases use only the medication, for while cleansing, the parts are medicated and the patient is

quickly and easily treated. However, after using the cleansing solution, use the medication, slightly warmed over a lamp or gas jet.

R. Oil vaseline	2 ounces
Eucalyptol (Sanders & Son)	3 minimis

In the atrophic form of catarrh there is the so-called inflammation, with thinning of the mucus membrane and sub-mucus tissues, sensibility diminished, secretion profuse, tenacious, incrusting upon the effected surfaces, and is dislodged with difficulty.

In these cases the cleansing solution given above is indispensable and used with the same care and caution until the surfaces are entirely cleansed. After which use the medication composed of

R. Oil vaseline	2 ounces
Oil wintergreen	10 minimis
Resorcine	5 grains

All these solutions should be warmed to blood heat before using, and applied gently and carefully, spraying the parts. The application should be made once or twice daily for a while; then less frequent. After the first month's office treatment it is best to give the patient a home treatment which he can use at any time desired. For this purpose I have a device consisting of a "U"-shaped metal tube bearing a rubber cork, and placed in a bottle holding the fluid vaseline preparation as above and connected with a rubber bulb. In the metal tube there is a series of small holes by which the volume of spray is regulated. With this the patient can treat himself quite well, and in many cases it is all that is required to effect a cure.

I have used the above treatment in patients of all ages for years, and can testify as to its efficacy. Mild cases in children the fluid vaseline alone is often

sufficient to effect a cure, sprayed into the nose anteriorly. In older persons the treatment is necessarily long-continued, for it must be remembered that it is a chronic disease and requires

chronic treatment, but relief is certain after the first few days' use of the remedies. I rely very much upon the fluid vaseline as a curative agent in the treatment of all catarhal affections.

SELECTED ARTICLES.

SUPPURATIVE NEPHRITIS.

BY ARCH. DIXON, M. D., HENDERSON, KENTUCKY.

Suppurative diseases of the kidney are various and distinct, and may be described, as by Greig Smith, as (1) simple circumscribed renal abscess; (2) general nephritis, pyelitis and pleuro-nephritis, surgical kidney; (3) scrofulous kidney—or more properly speaking, tubercular kidney.

Renal abscess has its typical origin from injury, as from a blow, from calculous or other foreign body or from exposure to cold; it may be secondary to perinephritic abscesses.

Renal abscess is usually limited to one kidney. It may find its way into the pelvis and thence into the bladder through the ureter; or it may burst through the capsule into the surrounding cellular tissue, causing perinephritic abscess, or both may occur. It is by no means rare to find more than one abscess in renal tissue. In many cases the whole organ is transformed into an abscess, limited by pelvis and capsule and partly subdivided by septa.

In acute cases, the symptoms are frequently ushered in with rigors, often repeated, and great elevation of temperature. In chronic cases there may be little or no fever at any stage of the disease. Pain in the region of the kidney is usually complained of. Pus may be found in the urine; if it is considerable in amount and accompanied by decrease in the size of a lumbar tumor, the existence of renal abscess is almost certain.

A sense of increased resistance in the loin to the examining fingers, edema and redness of the skin, and complaints of local pain on pressure suggest renal abscess. The disease is always attended by great prostration, rapid emaciation and complete loss of appetite.

Suppurative nephritis is usually described as secondary to some disease of the lower urinary tract. It may be confined to the pelvis, when it is known as pyelitis; or to the kidney, when it is described as nephritis; or it may involve the whole renal organ, when it is known as pyelo-nephritis. In its typical development it is best known as "surgical kidney"—that is to say, it has its origin in any disease of the penis or bladder, for which surgical treatment has been or may be instituted. The disease, perhaps is more frequently due to a want of surgical treatment than to excessive or erroneous application of it.

From the nature of the disease, both kidneys are usually affected; and this fact in itself is sufficient to forbid a local operation of any magnitude. Suppurative nephritis is, in the great majority of cases, a rapidly fatal complaint, and surgical treatment offers little or no hope of cure.

The same may be said of scrofulous (tubercular) kidney or scrofulous pyelonephritis as it is sometimes called, which is an inflammation of the kidney attended with a formation of the charac-

teristic cheesy material. In view of the undoubted frequency of this disease in the other kidney and in other organs operative procedures should be viewed with caution.

Peri-nephritic abscess is in most cases secondary to abscess of the kidney itself. It occurs also as a primary idiopathic disease, quite independently of the kidney, and also as a consequence of urinary extravasation, or renal fistula. As a primary disease it is usually the effect of some injury. Occasionally it occurs as a sort of metastasis from operation upon, or inflammation in distant parts of the urinary or generative organs. The symptoms of peri-nephritic abscess are, in the first place, those of deep-seated suppurative inflammation with its ordinary local and general concomitants, situated in the tissues surrounding the kidney. Further, special signs have been observed, such as lameness on the affected side with flexion of, and inability to extend the thigh, due to edema of the foot and ankle.

Roberts, after an elaborate study of this condition, gives the following directions for the localizing of peri-nephritic abscesses: "In all anterior regions we may expect pain, tenderness, swelling, edema, or pointing in front or at the side of the abdomen. In all posterior regions we look for pain, tenderness, swelling, edema, or pointing in the loin. In the upper tracts peri-nephritic abscess will probably cause pleuritic friction, pleural effusion, empyema, expectoration of pus and dyspnoea; on the right side we may expect to find edema of both legs, jaundice, fatty stools, persistent vomiting, rapid emaciation and ascites. In the middle tracts there may be albuminuria and casts, supra-pubic, scrotal or vulvar pain, or anesthesia, suppression of urine, uremia, pyura, edema of the scrotum." In the lower tract, he tells us to expect with peri-nephritic abscess flexion of the hip, pain or anesthesia in

the front, the outside or the inside of the thigh, pain in the knee, scrotal or vulvar pain or anesthesia, without albuminuria, unilateral edema of legs, abscess pointing near Poupart's ligament—with constipation—on the left side and involvement of the receptaculum chyli on the right side.

No such directions are laid down for our guidance in renal abscess, the symptoms of which are often obscure and misleading, as the history of the following case will show:

Robt. M., aet. 18, fisherman, came under my observation August 16, 1884. Two weeks prior to my first visit had been much exposed to the sun and was wet almost continuously during the day, being engaged in hauling a seine. That night he had a chill, followed by fever daily, which did not yield to quinine, etc., with evening exacerbations. There had been some diarrhea followed by constipation. Examination revealed slight emaciation, tongue dry, with brownish coating, slight sordes on teeth and foul breath, abdomen slightly tympanitic, tender; tenderness accentuated over the cecal region; temperature, morning, 101° , evening 103° . Pulse, 110; anorexia and a disposition to sleep, with night sweats. There was no evidence of any abdominal tumor, nor had the patient complained of special pain since the day following the attack. On that day there was soreness of all the musculature with sharp pain in the back. My diagnosis of this case was typhoid fever, and as such I treated it for ten days, the temperature morning and evening varying but little from that recorded on the day of my first visit. The pulse, however, had varied much, running from 82 to 130. Peptonized milk, broth and stimulants were given freely. Quinine, 2 grains three times a day. Turpentine emulsion and sponge bath about constituted the therapy in the case.

Aug. 26.—M. informed me that, after moving his bowels thoroughly by

enema, he had felt something growing in his right side. Palpatation elicited the fact that there was a tumor about the size of an orange, deep down in the renal region—fluctuation could not be made out. The examination was followed by a rigor so severe in character that a hypodermic of morphia and atropia was administered. There had been slight rigors for some days previous to this, but no especial importance was attached to them. Upon further inquiry the fact that the urine had been cloudy and thick for several days was elicited. Renal abscess was at once suspected and specimens of urine taken for examination. Pus corpuscles and casts were found. The following day an exploring needle was passed into the tumor and some pus was withdrawn; there was no longer any doubt in the case, and abscess of the right kidney was diagnosticated. An operation was proposed and accepted, and the afternoon of the same day nephrotomy was done, giving exit to about six ounces of pus and urine. Explorations were made, digitally and with a fine exploring needle for calculus, none being found. The incision in this case was the oblique lumbar, as recommended by Morris, beginning close to the edge of the erector spinae, half an inch or more from the border of the twelfth rib, and carried obliquely downwards and forwards the crest of the ileum for three or four inches; the quadratus lumborum was divided transversely in order to obtain more room.

The deep lumbar aponeurosis was then divided and the circumrenal fat exposed. All bleeding points were stopped either by forceps, pressure or by ligature. The fatty capsule was then teased open with forceps and the surface of the kidney exposed. A small tenotome was passed into the kidney followed by a dilating forceps and the opening enlarged sufficiently to admit the finger; about six ounces of pus flowed out. A drainage tube was

placed in the wound, after thorough disinfection, which was closed in the ordinary way, by deep and superficial sutures. Marked improvement was manifest the following day, which continued uninterruptedly. The drainage tube was removed on the eighth day, a small fistulous opening remaining, which in two months had entirely disappeared.

Smith thus sums up the indications for the operation of nephrotomy: "Nephrotomy is indicated in all cases of cystic enlargement when puncture has failed. More precisely it is called for in cases of simple cyst where tapping has been performed five or six times without effecting a cure. In hydatid disease, if one tapping does not kill the parasite or check the growth of the tumor, nephrotomy may be properly performed. In hydro-nephrosis, if the cyst rapidly refills after two or three tappings, or if rupture seems imminent, nephrotomy is indicated. In every case suppuration in a cyst is an indication for incision and drainage. In all cases of suppuration in and around the kidney incision with evacuation of pus and drainage of the abscess sac is indicated. Contra indications in such cases are: Firstly, such a condition of exhaustion as would negative any serious surgical exploit; and, secondly, a diseased condition of the opposite kidney. Whenever operation for abscess is feasible, nephrotomy ought to be the first operation. The prime object is evacuation of pus. Secondary objects are diagnosis of the actual state of affairs and determination of the chances which nephrotomy provides towards cure, and preparation of the kidney and the patient for the major operation of nephrectomy when incision cannot be expected to be curative. Nephrectomy performed in the first place as an operation following on nephrotomy and drainage. The patient gains strength after evacuation of an abscess, and the kidney decreases in size, while the

vascularity of the organ and the density of the adhesions become less marked after drainage.

Rarely is operation admissible in suppurative nephritis or pyleo-nephritis—in uro-septic or surgical kidney. Scrofulous kidney as often calls for excision as for incision—at least when the abscesses are small and numerous."

Before performing nephrotomy it is

advisable, though not necessary, to take measures for ascertaining the condition of the other kidney. But the justifiability of the operation will be the urgency of the disease. Whether the opposite kidney is sound or not, renal or perirenal abscess which is endangering the patient's life must be evacuated if the general condition will warrant operation.—*Weekly Med. Review.*

TREATMENT OF CATARRHAL JAUNDICE.

BY R. N. KITTRELL, M. D., GADSDEN, ALA.

When only a single recovery can be adduced in support of a certain line of treatment there is usually some room for doubt, but when five cases occur of the same disease, all conducted to speedy recovery by the same therapeutic measures, there is just reason to believe that the remedial agents are efficacious, and that a true sequence of cause and effect exists.

As my cases are identical in every respect, I will discuss them collectively, for fear of wearying my reader by tiresome repetition. In each case there were frontal headache, an intensely yellow integument and conjunctivæ, a bitter taste in the mouth, and tongue covered with whitish fur. The bowels were, for the most part constipated, and, if moved, the dejections were of a light color. The urine presented the appearance, as one of my patients graphically described it, of mustard and water.

The respirations were shallow, as more or less pain was usually produced by taking a full inspiration. The pulse varied from forty to sixty-five beats per minute, owing to the sedative effect of bile upon the circulation. In all the cases there was slight pain and tenderness in the epigastrium and lower portion of the right hypochondriac region. This symptom led me to believe that

there was subacute inflammation of the duodenum, and that the jaundice was due to absorption, caused by the obstruction of the ductus communis choledochus by mucus. An examination of the urine confirmed this opinion. By means of Pettenkofer's test I detected the presence of biliary acids in the urine, and thus clearly proved that the jaundice was due to the absorption and not to the suppression of bile, for, as is well known, the biliary acids are formed by the liver, and, if it had been a case of suppression of bile and the liver had struck work, no biliary acids would have been formed, and consequently their presence in the urine could not have been detected.

On the other hand, in the case of absorption, bile is formed by the liver, but being dammed back upon the liver by an obstruction in the biliary passage, the biliary acids along with other constituents are taken up by the lymphatics and capillaries, are eliminated by the kidneys, and consequently can be detected in the urine by the proper tests. I fear that my readers will accuse me of being too prolix and didactic, but this is the mode of reasoning by which I arrived at my diagnosis, and they will pardon me for reproducing it on paper. Having settled the matter of diagnosis satisfactorily to my

self, I next considered the treatment. In each case I employed a drachm of the phosphate of sodium three times a day, and externally an application to the right side of dilute nitromuriatic acid. A flannel jacket was made, sufficiently large to cover the entire right side, and confined by tapes attached to the borders of the flannel cloth and tied under the left axilla. This flannel was worn constantly, and was kept saturated with the dilute acid. Under this treatment the longest time required for

recovery was thirteen days; two cases recovered within a week's time, and two in about ten days. I attribute the good results in these cases principally to the phosphate of sodium, for one of my patients neglected to use the acid, and recovered promptly in about a week's time. I consider that I have attained very good results in the treatment of this affection, and if any one can show better results from the employment of other remedies, I shall be glad to profit by his experience.—
Medical Record.

CALCIUM CHLORIDE IN GLANDULAR AFFECTIONS OF THE NECK.

BY THOMAS J. MAYS, M. D., PHILADELPHIA, PA.

In the progressiveness of medicine many of our old and important remedial agents are, without adequate reason, pushed aside, and become superceded by something else which has been more recently placed in the therapeutic market. Such has undoubtedly been the history of calcium chloride—an agent held in the highest esteem by the earlier practitioners of medicines. It is hardly recognized by therapeutic authors of the present day. It is not mentioned by Wood (H. C.), Ringer, Bartholow, Stille, Binz, Kohley, Schmiedeberg, and Nothnagel and Rossbach. Dr. George B. Wood ("Therapeutics and Pharmacology," vol. ii, p. 369) says that before the discovery of iodine, calcium chloride was among the most popular remedies for scrofula, and that the united testimony of many practitioners shows that it possesses useful powers in these affections. It was likewise a favorite remedy with the late Dr. Warburton Begbie, and Dr. S. Coghill, of the Royal National Hospital for Consumption at Ventnor, in a communication to the *Practitioner* (vol. xix, p. 247), states that he has "again and again seen chronically in-

durated and enlarged glands, which absolutely amounted to deformity, and which had resisted all previous treatment, yield, even in adults, to the administration of this salt. In children and young persons, when the sleep becomes restless, the breath fetid, the tongue foul and coated, the tonsils enlarged, I know of no remedy approaching it in value. The colliquative diarrhoea which so often accompanies this condition, and, above all, that obstinate lientery which is seen with hypertrophy of the mesenteric glands; yield to the solution of the chloride of calcium like a charm."

I have used this agent for a number of years, both in private and public practice, and can fully endorse the strong views expressed by Dr. Coghill, especially in so far as scrofulous affections of the neck are concerned. Very often one meets with pale, rickety children, who have swollen cervical glands, poor appetite, coated tongue, constipation, and in whom there is a general indication of mal-assimilation. Such patients usually receive the routine treatment of cod-liver oil, externally. This succeeds sometimes, but

oftener fails. Here the chloride of calcium acts admirably. It reduces the enlargement, promotes nutrition, and is generally more efficacious than anything I have ever prescribed. Its solvent power is equally marked in the glandular swellings of adults, although here it requires a longer time, and its action is facilitated by the simultaneous application of iodine.

This agent must not be mistaken for

the chloride of lime—the ordinary disinfecting powder—the composition of which is entirely different. By prescribing the granular calcium chloride, this possible error will be avoided. The dose is from two to four grains for children, and from ten to twenty grains for adults. It can be given in milk or water, but the best vehicle for it is the syrup of sarsaparilla.—*Archives of Pediatrics.*

ON HEADACHES FROM OVERLOOKED CAUSES IN THE NASOPHARYNX AND EARS.

BY H GRADLE, M. D., CHICAGO, ILL.

The present communication is intended to call attention to certain attacks of more or less persistent headache, the causes of which are often overlooked. These headaches, due to naso-pharyngeal or aural disorders of which the patient is scarcely conscious, are perhaps not common. But the fact that they do occur and can be more or less readily relieved seems to warrant their description. If the writer has seen a fair number of these somewhat exceptional cases, it is on account of their having been referred to him—often under the impression that their cause might be some refractive or other anomaly of the eyes.

Four types of such disturbances have been seen often enough to be classified as types.

1. The least frequent form of such headaches of occult origin is that of diffuse pain throughout the head, lasting from one three and even five days. Such an attack may occur again after a variable length of time, or (more rarely) one attack may occur directly after another. Between those instances in which the patients complain of nothing but the headache, and the other extreme in which malaise, bone-ache, and slight rise of temperature charac-

terize the disorder as an acute infection, all gradations can occur. In the last-named class of cases slight throat symptoms point out the hidden origin of the trouble, viz.: circumscribed follicular tonsillitis, or rather follicular angina. For the lesion may be either in the tonsil, or in a lymphatic follicle of the pharynx, or in the pharyngeal tonsil or its lateral expansions. It can be seen in the form of a whitish spot, located in a crypt and surrounded by a narrow congested zone. The more numerous these inflammatory foci the more marked are the febrile symptoms, and the more noticeable the local disturbances, while a single spot may not make itself felt in any way but by headache.

Although each attack is self-limited in course, its duration can be shortened by brushing with a strong solution of nitrate of silver.

2. A second more common type of headache is a dull occipital pain, lasting only perhaps some hours or days, but frequently returning. It is occasioned by enlargement of the pharyngeal tonsil in the form of adenoid vegetations. It occurs especially during the congestion started by a fresh "cold," but at other times as well. I have met with

it only in children. Any extensive granular hypertrophy at the roof of the pharynx can scarcely be overlooked by an attentive physician. But a minor degree of enlargement in an otherwise healthy child may give rise to no symptoms but those of impeded nasal respiration at night, and may hence escape detection. The treatment is as simple as it is efficacious, viz.: operative removal of the pharyngeal tonsil.

3. Headaches due to hypertrophy of the nasal mucous membrane have come under my observation a limited number of times, but always in individuals either of a neurotic type or run down in health from overwork or worry. The pain was either frontal or diffuse, but increased by excitement or mental work. The nasal lesion consisted in hypertrophy of the mucous membrane, especially on the middle turbinated bone, from the free edge of which the swollen membrane protruded as if it were too large for the bony frame. In some of the cases distinct polypi were present. Catarhal symptoms, or at least catarrhal secretions, are not a necessary feature of this condition. Some of the patients, indeed, scarcely paid any attention to their nasal symptoms. I have generally found that where true hypertrophy of the mucous membrane predominates, the vascular irritability and permanent enlargement of the submucous cavernous tissue are not very marked. The nasal lesion can be cured by frequent spraying with nitrate of silver solution, and in proportion as the nose improves, the headaches diminish. Wherever the mucous membrane projects in polypoid form, it is of course

the quickest way to remove it with the hot or cold snare.

I will not refer at present to the various forms of headache associated with the condition of irritable nose. For in that form of trouble in which there is more or less enlargement of the cavernous tissue and consequently marked—though it be temporary—obstruction of the nasal passages, the patient will himself call the attention of the physician to the state of his nose.

4. A fourth type of almost continuous headache I have met with in children, dependent on diminished patency of the Eustachian tubes. When the hearing is not impaired a fairly intelligent child may suffer from a feeling of fulness in the ears without ever complaining of its ears. Occasionally the obstruction of the Eustachian tube, and subsequent reduction of intra-tympanic pressure, gives rise to persistent headaches, which stop at once on inflating the middle ears. If the Eustachian obstruction be one-sided the child notices a difference between the two ears. But if both Eustachian tubes are involved without marked impairment of hearing, the ear trouble may not be suspected, and it is only after inflation that the child feels that its ears are now "more natural" than they were before. Such slight Eustachian obstruction, and the headaches dependent thereon, can be readily cured in children by a few inflations, either by Politzer's method or, still better, by means of the Eustachian catheter. The nasopharynx should, of course, receive due attention, in order to prevent a return of the Eustachian obstruction.—*Journal of the American Med. Association.*

NASAL CATARRH.

BY J. COOPERIDER, M. D., OF LOUISVILLE, KY.

We find catarrhal troubles existing to a very great extent in a variable cli-

mate like ours; and especially one in which there is great and sudden vari-

ations in the temperature, and one in which the humidity also varies very greatly in a short time, thereby causing congestions of the mucus membrane lining the air passages.

2. The almost universal habit among our people of breathing through the mouth both asleep and awake.

3. Microscopic infusora, such as (*asthmatas cleararis*), thus fastening itself upon the mucus membrane of the air passages, and by its irritant action, causing severe congestions of the mucus membrane lining the air passages.

It is presumably a disease of civilized life.

4. Living in overheated rooms during cold weather, with the air very dry, so there is a greater demand than natural to humidize the air as it passes into the lungs.

5. Also passing suddenly from an overheated room into the air with the thermometer often below zero; in fact, going from the extreme of temperature to the other suddenly with the air very dry, for we very seldom see any artificial means employed to humidize the air of our living rooms during cold weather.

6. The carpet nuisance. The above are some of the prominent causes of this *malady*, and from the above statement of causes it will be very apparent what will be the proper course for us to pursue in the prevention of the malady when we can find the cause, but it is not always so easy to ascertain the cause in each particular case.

The climatic causes can be prevented by removing to a climate where the air is mild and where the temperature is not variable, and one in which the thermometer never rises above 75° or falls below 45° F, but if we cannot enjoy such a climate for ourselves and for our patient, we must supply the want as best we may by not getting into extremes of temperature and avoiding dusty air. We should advise our patients to breath always through the

nose so the atmosphere may become charged with moisture, and that it may carry away the mucus and the various exhalations from the nasal *air passages*.

The microscopical infusoria is one of the frequent causes of influenza and the consequent congestion of the mucus membrane, oft repeated as a consequence, causes one of the varieties of chronic nasal catarrh, and to prevent this class of causes we should spray the nostrils with disinfectants and bacteriacides.

We should never overheat our rooms, but keep the thermometer ranging from 45° to 70°, and make provisions for an ample supply of moisture at all times so that the air will make a small demand upon the nasal mucus membrane for moisture, and if it is necessary to pass from a warm room to the cold air of out-doors, we should do it gradually or cover our noses with a respirator or handkerchief until the air passages become accommodated to the change. Alcoholic beverages of all kinds should be interdicted, as it is a well known fact that the use of alcohol enlarges to a great degree the capillary vessels of the nose, throat and face. So also should all the various condiments and spices be forbidden, as they invariably cause a congestion of the mucus membrane to which they are applied.

Treatment.—As we have anticipated so largely our treatment in our remarks on prophylaxis, we may now waive all preliminary remarks and proceed at once with our thoughts on the medical and surgical treatment of the disease in hand.

In the preliminary stage known as coryza or a common cold, we should attempt to cut it short, so as to relieve the mucus membrane as much as possible of the congestion, and restore it to its normal condition, and we can accomplish it by various means, such as a hot bath for the feet and drinking warm carminative teas, such as mint-balm, and even capsicum, but the most

efficient means is to eat nothing but crackers and drink a small bit of tea, or a bit of toast and tea, and administer a saline cathartic, or a small dose of calomel followed in a few hours with a seidlitz powder.

But the most satisfactory is to sniff up each nostril until the patient tastes it a small quantity at a time, at short intervals, of the following:

R. Quiniae, Sulph., 5 grs.
Iodoformi, 2 grs.

Sig: Use a snuff every two or three hours. But as we very seldom see the case until it has assumed its sub-acute or chronic form, and even then it is most likely to have assumed its most obstinate and serious form before the case is brought to our notice, we should at once assume active measures by correcting the secretions by free doses of calomel and ipecac et opii. pulv., followed by a saline cathartic, and when we get the alimentary canal well cleared, and the secretions well established, we should put our patient upon a diet of bread and milk, with vegetables, and as a local application some of the vegetable astringents, e. g. glycerinum acidi galici by means of pledgets of absorbent cotton two or three times a day, or as some prefer the spray; or the following as a sniff every two or three hours:

R. Acidi Tannici, 5 grs.
Iodoformi, 2 grs.

Sig: Use as a snuff. All the vegetable astringents are admissible in this case, and some of the mineral, as zinc. sulph., cu. sulp., etc., but the best is argentum nit. 30-40 grain to the ounce, making the application with glass brush, or a pledge of absorbent cotton once in two or three days. These are the more applicable in the chronic cases.

Where the nares are dry and full of crusts, the spray of the following is excellent:

Fd. ext. quillaiae,
Fd. ext. eucalypti, $\frac{1}{2}$ oz.
Glycerini and aquæ dest., 1 oz.

Sig: One teaspoonful to ounce of water; use with a spray twice a day in each nostril until the crusts are all loosened and come away. Some prefer Dobell's solution, which is as follows:

R. Sodii boratis,			
Sodii bi-carb,			1 dr.
Acidi carbol,			$\frac{1}{2}$ oz.
Glycerini,			1 oz.
Aquæ font			2 pints.
Ft. solutio.			

Sig: Use as the other with a spray.

After the crusts are cleaned away the following is excellent:

Hydrastis,		2 drs.
Glycerini,		$\frac{1}{2}$ oz.
Aquæ font,	qs. to make	4 oz.

Sig: Each nostril to be well sprayed twice a day. If the nostril should be inclined to very free secretion the following is excellent: Quinia sulph. 10 grains, iodiform 5 grains. Use as a snuff three or four times a day until the patient tastes the bitter; or Boulton's solution used with a spray.

In those cases in which there is dryness of the mucous membrane in the nostrils, and a thick glairy mucous discharge from the vault of the pharynx, the topical application of iodine to the post-nasal cavity is of great benefit in stimulating the serous glands and making the secretions more watery; besides it has the effect of diminishing the hyper-sensitiveness of the palate, so that after a few applications a rhinoscopic view can be obtained, which, before was impossible.

The application can be made through the mouth or along the floor of the nostril, in either case by means of a tuft of absorbent cotton fastened to the applicator bent to the right angle.

When the application is made through the mouth great care must be exercised to prevent the iodine from entering the larynx by running down along the posterior wall of the pharynx, for if it does it almost always causes severe laryngeal spasm.

Three solutions of the following

strength will be found to answer in most cases:

No. 1 R.	Iodini resub,	8 grs.
	Potassii iodidi,	38 grs.
	Glycerini,	6½ oz.
No. 2 R.	Iodini resub,	12 grs.
	Potassii iod,	1 dr.
	Glycerini,	6½ oz.
No. 3 R.	Iodini resub,	15 grs.
	Potassii iod,	75 grs.
	Glycerini,	6½ oz.

Apply No. 1 until the patient ceases to feel any sensation; a few minutes afterward No. 2 should then be used, and when it loses its power to irritate, No. 3 should be used: but it is not often needed.

There are a number of drugs when taken internally act upon the mucous membrane of the nasal cavity, and thus aid the local application in their curative action.

Among them are the iodide of potass. in small doses combined with bromide, fluid extract grindelia, robusta, idoform, crude petroleum, etc.

Tonics, fresh air, regulation of diet, and hygienic surroundings, remove all carpets, let the patient live on waxed and polished floor, and study to remove all exciting causes of the trouble.

The surgical treatment will call for the removal of all obstacles to the free entrance of air into the nasal cavities.

Hypertrophies can be removed by the application of caustics as nitric, chromic or acetic acid (glacid); or preferably the galvano cautery, but the best laryngoscopists of to-day almost invariably discard caustic application in any form to the mucous membrane of the nose and throat, but if milder means fail the galvanic cautery is the only safe and successful application.

Polypus can be removed with the wire or catgut snare.

I have now given you an outline of the treatment of that most common of all complaints, the disease of civilized life, nasal catarrh.—*Progress.*

ELIXIR OF THEINE HYDROBROMATE.

Mr. J. W. England, of Philadelphia, at the meeting of the College of Pharmacy, May 15, read a paper on theine, in which he states that, of all the possible salts of theine—the term is here used synonymously with caffeine—the hydrobromate would, he says, seem to be the one whose chemical character would most consistently give the best therapeutical action. The sedative alkaloid theine, being in combination with the sedative hydrobromic acid, the action of theine hydrobromate should be doubly happy. He admits that the percentage of the acid is small, but, all things being equal, thinks it should, theoretically, be the best. Reasoning on this basis, Mr. England constructed an elixir of theine hydrobromate, which was used medicinally, and

the results obtained would seem to justify the highest expectations formed in regard to it. The formula use is as follows:

Take of

Theine,	1½ drachms.
Dilute hydrobromic acid,	1 drachm.
Water,	1 ounce.
Elixir of orange,	q. s. and Oi.

Dissolve the theine in the water and hydrobromic acid with the aid of heat, filter, and add the orange elixir. Dose: 1 to 3 teaspoonfuls. The product is a clear, transparent, water-white liquid; pleasantly bitter in taste; almost neutral in reaction, miscible with an equal volume of alcohol without precipitation. Each teaspoonful contains one grain of anhydrous theine hydrobromate ($C_8H_{10}N_4O_2HBr$).—*American Journal of Pharmacy*, June, 1888.

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EDITORIAL.

THE CONGRESS OF AMERICAN PHYSICIANS AND SURGEONS.

The first Congress of American Physicians and Surgeons was held in Washington, D. C., during the past week. From all accounts it was an entire success, both in point of numbers and the high character of the papers read. This congress was composed of eleven different societies, as the American Surgical Association, Ophthalmological, Dermatological, etc., etc., and the American Gynæcological Society joined the congress at the meeting just closed. Two other new societies, the Pædiatric and Anatomical, made application for admission, as also did the American Association of Obstetricians and Gynæcologists. The meetings of the congress will be held in Washington every third year, and thus it will not interfere in any way with the regular work of the component societies.

The organization of this congress has been looked upon with distrust by many physicians throughout the land who are not members of any of the societies forming it, and who are members of American Medical Association. The fear has been that it will detract

both in membership and quality of the work done, from the parent organization. Such a fear is probably unfounded. These special societies are formed to bring into closer contact the specialists of the country, who will always remain in the minority, while the American Medical Association seeks to bring together all the reputable physicians in the land. Not only for scientific work, but for friendly acquaintance and social intercourse as well. Quite a number who are prominent in the congress are also regular attendants at and good workers in the meetings of the association, and we do not believe there is any good grounds for the fear that the congress will override or supplant or destroy the association. We should look with pride upon the work accomplished by the congress, knowing that it will compare with that done in any medical organization in the world. It will be an incentive to the ambitious to become worthy of a place in its ranks, should their tastes lead them into the lines of specialism. The parent association will always be com-

posed largely of the rank and file of the profession, the general practitioner, whose labors are of the greatest importance to the largest number of the people. In the public estimation the

American Medical Association will always hold the highest place, no matter what high sounding names may be given to other and rival assemblies.

THE PREVALENCE OF ABORTION.

For the past two years there seems to have been a tide of criminal abortion sweeping over the land, if we may judge from the increasing frequency with which the subject is alluded to and denounced both in the medical and lay press. Occasionally an abortionist is caught at his or her devilish work and sent to prison, but so seldom is justice meted out to the offender in proportion to the entire number of cases that it fails of its purpose.

We do not suppose that Peoria is more cursed with this form of crime than other cities of the same size, but it is bad enough.

The number of still births reported is not a full index to the total number of child murders committed. One undertaker told us that he had buried three babies for one woman in less than three years, and in every instance he was satisfied that the child had been killed by the wilful induction of premature labor. Yet as he had no evidence to corroborate his suspicions he could do nothing. Physicians can do but little more to bring these offenders to justice. They may be satisfied that crime has been committed, but those accessory to it deny everything and manage to successfully cover up all evidences of criminality. Again the

woman upon whom the abortion is produced is guilty in the eyes of the law, and when she recovers that fact seals her lips against the abortionist. Some men calling themselves physicians do much to aid and abet this crime.

We know of an instance in this city where a doctor sold at least a dozen steel sounds to women for the purpose of bringing on "delayed menstruation." A woman possessing one of these instruments used it upon herself almost at the cost of her life, and it was while attending her that she told us how many of her friends had instruments and how often they had been used successfully. The doctor selling them was then dead, so she had no reason for longer concealing his name.

The only way this crime can be broken up is to cause a "coroner's inquest" to be held upon every case of still-birth, with the strictest penalties for concealing any case from whatever cause. Were this done it would deter many women from submitting to the practice, and good evidence could soon be gathered to convict the abortionist or at least scare him or her from the business. Legislation is needed upon this crime and we hope the matter will be placed in proper light before the next legislature of this state.

BOOK NOTICES.

THE LANGUAGE OF MEDICINE. A Manual giving the Origin, Etymology, Pronunciation and Meaning of the Technical Terms Found in Medical Literature. By F. R. CAMPBELL, A. M., M. D., Professor of Materia Medica and Therapeutics Medical Department of Niagara University, 8 mo., cloth, pp. 318. D. Appleton & Company, New York, 1888.

This is a book the title of which would seemingly indicate that it is about as interesting as a grammar or dictionary, but here the supposition is incorrect, for part of it at least is as interesting as a work of fiction to the novel reader, and the other part as useful as any book of the kind can be made. This volume gives information about the language of medicine that cannot be found in any other one book with which we are acquainted.

The chapter on the historical sources of the language of medicine is complete, and contains not only a vast amount of knowledge, but will also whet the appetite for more, and incite the reader to extend his knowledge by his own efforts.

The other parts of the book give the non-classical scholar an introduction into the Latin and Greek elements of the language of medicine that will serve a very useful purpose, and if carefully studied will go far to make up for early deficiencies. It is a most excellent work, and we cannot too heartily commend it.

THE PHYSICIAN'S LEISURE LIBRARY. Diseases of the Male Urethra. By FESSENDEN N. OTIS, M. D., New York. pp. 86; paper, 23c; cloth, 50c.

ABDOMINAL SURGERY. By HAL C. WYMAN, M. S., M. D., Professor of Surgery and Operative Surgery, Michigan College of Medicine and Surgery, etc., etc. Pp. 88; paper, 25c; cloth, 50c.

DISEASE OF THE LIVER. By BUJARDIN-BEAUMETZ, Paris. Translated from the Fifth French Edition, BY E. P. HURD, Newburyport, Mass. pp. 185.

The above are three new volumes of this popular library, published by Geo. S. Davis, Detroit, Mich.

The little work of Prof. Otis contains much that is true and not commonly accepted upon the urethral reflexes and their treatment. It is strange what a great diversity of symptoms and strange pains are caused by a narrowing of the calibre of the male urethra. It is a very useful little work.

Dr. Wyman tells how he taught himself abdominal surgery and leaves no excuse for any one to plead ignorance of procedure and manipulation in this very important surgical field. After reading his book, many things before obscure become clear and easy of comprehension. He is an easy and graceful writer, and his book is exceedingly instructive. He tells you just how and why to do everything in connection with his subject.

Dujardin-Beaumetz has become too well known to the American reading profession to need more than an announcement of a new work. Like all his preceding ones, it is plain, and contains the latest and best French teachings upon the important organ of which it treats.

THE APPLIED ANATOMY OF THE NERVOUS SYSTEM. Being a study of

this portion of the human body from a standpoit of its general interest and practical utility in diagnosis, designed for use as a text book and a work of reference. By AMBROSE L. RANNEY, A. M., M. D., Professor of the Anatomy and Physiology of the Nervous System in the New York Post-graduate Medical School and Hospital, etc. Second edition, re-written, enlarged and profusely illustrated. 8 vo., cloth, pp. 791. D. Appleton & Company, New York, 1888.

This is a work which, so far as we know, has no exact counterpart in medical literature. The reception accorded to the first edition was abundant evidence that such a work was needed and appreciated by the profession, and its adoption as a text book in many medical colleges proved its value in the minds of the teachers of medicine. This edition is entirely rewritten and is practically a new work, the latest discoveries in the anatomy and physiology of the brain and nervous system are incorporated in it, and in every respect it is brought up to the present time. Not only is this work thoroughly scientific, but it is also eminently practical, and will assist the general practitioner in solving many obscure points in cases where the nervous system is at fault.

THE SURGICAL DISEASES OF THE GENITO-URINARY ORGANS INCLUDING SYPHILIS. By E. L. KEYES, A. M., M. D., Professor of Genito Urinary Surgery, Syphilology and Dermatology in Bellevue Medical College, etc. A revision of the Buren and Keyes' Text Book upon the same subject. Illustrated, 8 vo., cloth, pp. 704. D. Appleton & Co., New York, 1888.

We know of no one work upon this subject that is so safe and sure a guide in the treatment of this class of cases,

It is comprehensive, but always plain and practical, and deservedly stands high in the estimation of the profession. This new edition contains all recent discoveries in pathology and the latest and best methods of treatment: but farther praise of this standard work is superfluous, every doctor knows of its worth and every doctor should have it in his library.

THE PATHOLOGY, DIAGNOSIS AND TREATMENT OF THE DISEASES OF WOMEN. By GRAILY HEWITT, M. D., F. R. C. P., Professor of Midwifery College, London, etc. A new American from the fourth revised and enlarged London edition, with 236 illustrations. Edited with notes and additions. By H. MARION SIMS, M. D., New York. Vols. I, II and III, 12 mo., cloth, complete in three vols. E. B. Treat, 771 Broadway, New York, 1887. Price, \$2.75 each.

Professor Hewitt deservedly stands high in the estimation of the American profession, and his work on diseases of women has been accorded a hearty welcome. This latest edition is issued in the neat and compact style of Treat's series of "Medical Classics," and as such will form a useful addition to the library. The notes of H. Marion Sims are neither numerous nor important, and their principal object seems to have been to connect his name with that of the well-known author of the work.

A MANUAL OF THE MINOR GYNECOLOGICAL OPERATIONS. By J. HAL-
LIDAY CROOM, M. D., F. R. C., P. E.,
F. R. C., S. E., Lecturer on Midwifery
and Diseases of Women at the
School of Medicine, etc. First Amer-
ican from the second Edinburgh Edi-
tion. Revised and enlarged by LEWIS

S. McMURTRY, A. M., M. D., with numerous illustrations; 12 mo., cloth; pp. 228. Records, McNullin & Co., Philadelphia, Pa., 1888.

This is an exceedingly handy little volume. It is practical and to the point every time, and just such a book as every physician who attempts gynaecological operations would like to have for frequent reference. It has gained much in value and usefulness by the careful editing of Dr. McMurtry, who is rapidly coming to the front rank in American gynaecology. The section on laparotomy was entirely written by him, and is one of the best of the work.

A REFERENCE HAND BOOK OF THE SCIENCES, embracing the entire range of Scientific and practical medicines, and allied Sciences, by various writers. Illustrated by chromolithographs and fine wood engravings. Edited by ALBERT H. BUCK, M. D., vol. vi, 4to, cloth, pp. 778 (Pra to Teb), Wm. H. Wood & Co., New York, 1888.

It is superfluous to more than refer to this work. It is undoubtedly the best of its kind that has ever appeared in the English language, and will ever remain a monument to the wisdom of

its editors and the liberality of its publishers. It is a whole library in itself.

EXCESSIVE VENERY, MASTURBATION AND CONTINENCE. The Etiology, Pathology and treatment of diseases resulting from venereal excess, masturbation and continence. By JOSEPH W. HOWE, M. D., Author of "Exercises," "The Breath," "Winter Homes for Invalids." Late Professor of Clinical Surgery in Bellevue Hospital Medical College, etc., etc.; cloth, 12 mo., pp. 300. E. B. Treat, 771 Broadway, N. Y. Price, \$2.75.

The author states that this volume contains the substance of a course of lectures on the subject. It is, to our way of thinking, hardly a subject that calls for a separate volume, as it is fully treated in other systematic works, and most of the contents repeat the same old illustrations from French authors Acton, Hammond and others, that are nauseating from this eternal repetition. We fail to find anything that is new, either in the etiology pathology or treatment of this class of cases, or better than is given in other works already in the hands of the profession.

PERISCOPE.

INFANTILE LEUCORRHœA. — Although termed infantile because it frequently is seen in children three or four years of age and even younger, it may present its peculiar features when its subjects have attained the age of twelve or thirteen. It differs from the leucorrhœa of adolescence or maturity, especially in two respects—namely, first, in the character of the discharge; and, second, in its locality. The discharge is serous, or purulent, or com-

posed of a mixture of serum and pus, and its seat is the vulva. The leucorrhœas of the adult consist very largely of mucus and vaginal epithelium, with more or less admixture of sebaceous matter; but the vulvar mucus and sebaceous follicles are not developed in childhood, and hence these elements are absent in the discharges of infantile leucorrhœa. Then again, it is rare to find the source of this latter disorder above the hymen.

Very frequently the subjects of this disease are strumous, sometimes the victims of hereditary syphilis, and they are predisposed to it just as they are to certain forms of cutaneous eruption, tuberculosis of the joints, and glandular enlargements. In such children, lack of cleanliness and other proper hygienic surroundings is sufficient to act as an exciting cause and to induce the discharge. The latter is always acrid, and produces at first itching, then pain, and the child's fingers by their scratching and rubbing add to the irritation, and soon inflammation of the skin and mucous membrane is set up or increased.

Leucorrhœa in children may be a sequel of acute exanthematous diseases, as small-pox, scarlatina, measles. Ascarides have been accused of traveling from the rectum to the vulva, and settling down there to cause itching and make trouble, but I have never caught them doing so. I knew one little girl in whom a severe purulent discharge was caused by the presence of a half-dozen small pebbles which she had pushed into the vagina.

The treatment is indicated by the pathology of the disease. For cases in which there is evident impairment of or feeble vital power, what is known as general treatment will not only constitute an important, but a necessary, element. Thus, in strumous children, you will need to secure improved digestion and assimilation by the aid, perhaps, of cod-liver oil, iron, cinchona, and still better, if possible, an abundant supply of nutritious food. Another important adjuvant is cleanliness. But, in addition to these means, local treatment is always necessary. And, before this is commenced, a very careful examination of the parts should be made, in order that one may be assured that neither ascarides nor pebbles are present to maintain mischief. The treatment will be simple; cleanliness must, first of all, be insisted upon.

The parts should be carefully cleansed by separating the labia and gently mopping away the secretion with a piece of absorbent cotton, which may be used dry or moistened with a solution of borax in water—one drachm to a pint. Soap is frequently irritating. Then, after drying the surface, a small pledget of cotton covered with vaseline and freely sprinkled with boracic acid should be placed between the labia. Instead of boracic acid, iodoform, or subnitrate of bismuth, or powdered borax may be used. The cleansing and the renewal of the dressing ought to be done two or three times daily. The objects of this treatment are to soothe the affected surfaces, to absorb the discharge, to prevent the possible adhesion of opposing abraded surfaces, and to protect them somewhat from the access of atmospheric air, the latter being sometimes a source of pain.—*Med. and Surg. Rep. Epitome.*

THE RELATION BETWEEN DIABETES MELLITUS AND DISEASES OF THE HEART.—Dr. J. Mayer (*Zeitschrift f. kl. Med. Bd. XIV H. 3*) announces that the heart is affected in cases of diabetes mellitus. In a disease which so thoroughly invades the whole organism, calling forth a great variety of symptoms, it would be almost a miracle if the heart did not escape untouched; yet the occurrence of a clear case of organic heart disease probably rarely stands in casual connection with diabetes mellitus. It is no wonder, then, that Seegen, Cantani, Senator, Leyden, Frerichs and others make no mention of this complication, and even Pavy, in his report of 1,360 cases of diabetes before the British Medical Association, does not consider the heart worthy of notice. Dr. Mayer, who has a large practice at Karlsbad, has collected 380 cases, of which 337 are between the ages of forty and sixty years, and of these cases, with reports of many others, he studied the symptoms of de-

rangements in the heart and circulation. He found a certain number with weak heart, some with possibly dilated cardiac cavities, and many had very ill-defined symptoms referable to the heart or that region. He infers that the changed condition of the blood must have some effect on the heart, and believes himself justified in inferring that the observations made by himself on heart disease in connection with diabetes mellitus are to be referred to the diseased condition of the body metabolism. All the patients showed a certain amount of cardiac weakness, and he believes that he has proved that this cardiac weakness has its origin in the demands which the altered metabolism makes on the heart, and which experience a partial compensation the earlier the organism begins to suffer and the sooner the formation of sugar and urea oversteps the limits within which a well-nourished kidney and heart can secrete them.—*Ed. Maryland Med. Jour. Epitome.*

OOPHORECTOMY AND THE SEXUAL APPETITE—The statement made by Mr. Lawson Tait at a recent meeting of the British Gynecological Society, that the ovaries have no more to do with the sexual appetite than have the front teeth, has excited some comment, and has roused the ire and evoked the spirit of sarcasm of some anti-gynecologists. If the allegation that the operation of oophorectomy is followed by the loss of sexual appetite be sustained by facts, the question arises as to whether that fact should constitute a contra-indication to the operation when performed for the removal of diseased ovaries. Moreover, some idea as to the extent and power of the sexual longings of women whose ovaries are the seat of a disease of such a character as to render their removal necessary must be formed before the question as to the anaphrodisiac effect of the operation can be decided upon, or before

liability to such an effect can be urged as an argument against the employment of the operation as a means of treatment. If the disease is capable of modifying or destroying the sexual appetite, the condition of the patient in that respect can not be made worse by the operation, and it seems hardly possible that a woman who suffers constant pelvic pain, and whose pelvic organs are in a state of such exquisite sensitiveness as to be intolerant of even the most gentle manipulation, can regard the sexual act as a desirable *finale* to the manifold aches and pains of a day of misery.

Few women who are afflicted with pelvic diseases are to any degree ardent in sexual matters. Indeed, by far the greater number of them complain of dyspareunia, of absence of all desire for or pleasure in the sexual act, or of actual repugnance to it. The same lack of desire and gratification in the act is often observed in women who are apparently free from pelvic disease, and who seek medical counsel from a desire to bear children, believing this frigidity to be the cause of their sterility.

If the ovaries be diseased to such an extent that their functional activity is lost, or if the Fallopian tubes are so obstructed or otherwise changed that their usefulness is gone, the physiological action of these organs is arrested; and if the sexual appetite be dependent upon the presence of these organs, and proceeds from them as its source, it can hardly be normal when these are functionally inactive, and exert only an irritating influence on the organism. The removal of the ovaries in such a case could not but be of benefit, and would theoretically be more apt to cause the return of sexual desire which had been destroyed as a result of the pain produced by copulation during the course of the disease. Dyspareunia can but result in great impairment of the sexual appetite, no

matter how strong this may originally have been, and this fact certainly lends much force to Mr. Tait's dictum that the removal of the ovaries has no power in itself to destroy sexual desire.

Women, unlike men, are usually dependent on their affections rather than their ovaries in the matter of sexual passion, but even the strong influence exerted by love and a desire to promote the happiness of its object can not change a physically painful ordeal into a pleasure, or induce a feeling of strong desire for such self-sacrifice. We find it difficult to believe that the removal of organs which have been so changed by disease as to cause the destruction of the desire which they are supposed to produce in the individual to whom they belong, can exercise anything but a beneficial effect in so far as sexual matters are concerned. Other considerations in regard to the operation are not now discussed, but if resulting loss of sexual desire is to be considered one of the chief objections to its employment, we fail to appreciate the force of the argument, or to understand the prominence which has been given to this alleged resulting evil.—*New York Medical Journal.*

CLASSIFICATION OF DISEASES BY MEANS OF COMPARATIVE NOSOLOGY.—The above was the subject of the address in medicine by a distinguished investigator and physician before the Glasgow meeting of the British Medical Association. He thought disease be classified by affinity, which should supersede our present system of classification by clinical features. The advances made in comparative nosology, a term rarely heard, have been less than should have been the case.

The nervous system, the highest organization, the functions of which have been of late years so ardently studied, received attention. In man the diseases of the nervous system

have attained a development so enormously beyond that of the highest pithecid forms that the diseases of man are correspondingly heterogenous. Modern observers are beginning to say that in man not fever only, but all maladies are primarily or secondarily neurotic. As the nervous system develops in the higher animals all diseases must take on a change of type, become more systematic, more complex, more sympathetic with disorder elsewhere, must tend in a word to primary or secondary neuroses. The diseases of the lower race of men will differ, and as a matter of fact do differ, from those of the higher.

In classification by affinity four methods of inquiry must be followed, namely, the hereditary, historical, geographical and experimental. In the records of hereditary disease we find that observation has been almost wholly directed to the detection of the recurrence of the same form of malady in one family tree, but if we desire a scheme of all the fatal and non-fatal diseases found in the same stock, it can not be furnished. The inherent tendency of organisms to vary, "nature's bent for inequality," in the words of Matthew Arnold, is well known if not explained.

The historical method leads to the philosophical in all studies, and no less in nosology; unhappily this study has not yet emerged from the prehistoric period. In the comparison of human disease as it now exists with its past history, we must remember that in the ruder states of man morbid variations were constantly eliminated in the struggle for existence. But we begin to see the converse of this condition when human society attained a high degree of development. Natural selection is modified by deliberate counter-plots; bad strains are preserved which in former times would have died out. However, bodily improvement may be sought at the cost of the higher mental and effective organizations. Dr. All-

but gave an interesting *resume* of racial characteristics in disease. He finds the Dutch rarely the subjects of irritative neurosis; the Scotch likewise have a relative rarity of purely nervous diseases, but cancer is more common in Cumberland than any other of the border counties. Apoplexy and palsy are more common among white than colored people, and among the Germans than the Irish. Among the Indians diseases of the nervous and circulatory systems are rare, but scrofula and consumption common. The Englishman is patient and courageous under sickness, while the Scotchman lies down and gives away under the same conditions, while the Irish Celt is fired with alarm and magnifies by his vivid imagination both his sickness and recovery. The study of racial peculiarities is intensely interesting, but the variations are known to be manifold. The Arab is not liable to tetanus; the poison of beriberus does not attack Europeans until they have lived in its district for a length of time; the resistance of negroes to yellow fever is common to all negroes, as is also their relative immunity from sunstroke and paludal fevers.

In speaking of the geographical method, Dr. Allbutt queried: How have the morbid varieties of man arisen? We can only answer in general terms that we must have especial regard to areas long undisturbed, and as we can not confound nations with races, so we must not confound kingdoms with physiological areas. As in various families in as various regions, we must work in each not only the prevalence of disease taken singly, but more especially the schedules of diseases, noting both co-existence and respective degrees of intensity.

The experimental method will teach us that drugs and poisons will not vary in their clinical effects on living beings by gradual augmentation of differences, but by leaps and bounds, as musical

scales respond to scales of vibration. It teaches us that clinical types can be the basis of nosological classification. As we rise higher and higher in the planes of function we enlarge the office of inhibition.

On motion of Professor McCall Anderson, a vote of thanks was given Dr. Allbutt for his address.—*Practitioner and News*.

URETHRAL DISCHARGES.—At the meeting of the Ontario Medical Association, June 13, 188, Dr. Grasett read a paper on urethral discharges (*Canadian Practitioner*, July, 1888). After referring to the frequency with which such cases are met and the depressing mental effect the condition often has upon the patient, he divided the subject into sections, according to the nature of the discharge. 1. When the discharge is the result of a catarrhal condition of the urethra—urethritis. This urethritis may be: (a) Simple, such as that set up by leucorrhœal discharge, excessive or violent coition, or mechanical irritation. This is usually less severe and of shorter duration than (b) specific urethritis or gonorrhœa. Whether or not this specific inflammation is always due to the presence of gonococci, cannot be regarded as proved. Experiments have failed to establish that it can be induced by injection into the healthy urethra, and it has not been found possible to inoculate animals with gonococci. Notwithstanding these facts, the almost constant presence of gonococci suggests that they are possessed of causative properties.

The plan of treatment found to be most useful might be summarized as follows: Rest in bed; cleanliness, secured by frequent passages of urine, or by injecting hot water. The patient should be instructed to allow the penis to hang in a natural position, so as to permit the discharge to run out; or a dressing of salicylic gauze might be

placed loosely over the end of the penis and covered with a rubber bag. The diet should be light and unstimulating; alcohol and tobacco must be avoided. Alkalies may be given, to keep the urine neutral or slightly alkaline. Injections, except of hot water, are harmful in the first or acute stage. The injections frequently given by chemists do great harm. In the late stages, sulphate and sulphocarbolate of zinc are beneficial in dilute solutions; so, also, is nitrate of silver.

2. Chronic discharge or gleet sometimes persists after an attack of gonorrhœa, in spite of treatment, both internal and external. An error in diet, or indulgence in alcohol or tobacco, will often cause a return to the catarrhal stage. The pathology of gleet probably depends upon the fact that the inflammation, which commences in the mucous membrane, spreads to the submucous tissues, and causes a thickened and granular condition of both. If a stricture is present, it should be dilated. The injections used should be mild and slightly stimulating astringents, and should be frequently changed. Caspar, of Berlin, recommends a combination of mechanical and chemical therapeutics. He uses nickel-plated bougies with grooves, into which he pours a medicated paste, which melts when the bougie is inserted into the urethra. He has used iodoform, zinc, resorcin, and other drugs, but has had the best results from the use of this formula:

Olei theobromæ	100	parts.
Argenti. nit.	1-1½	"
Bals. copaibæ	2	"

No bad effects have been noticed. Improvement begins at once, and the discharge, under the microscope, soon shows a diminution in the proportion of pus-cells.

3. Prostatorrhœa was first accurately described by Dr. S. W. Gross, of Philadelphia. It consists of a clear glairy mucus from the prostate, most frequently seen after straining at stool. It comes from the acini of the gland,

and is increased in quantity by disease of the rectum, masturbation, hard riding, etc. Several instances of this condition were cited, illustrating the good results which followed treatment by tonics and the local use of nitrate of silver.

4. Spermatorrhœa, or flow of semen, unaccompanied by sexual excitation or orgasm, is used by quacks and empirics to include nocturnal emissions, which, unless excessive, are an indication of health rather than of disease. If, however, they become too frequent and are followed by depression, they are pathological. The causes are, among others, hyperæsthesia, or irritation of the genitals, inflammation of the prostate or urethra, phimosis, etc. The treatment should be largely hygienic. Avoid alcohol and tobacco, empty the bladder the last thing at night and first thing in the morning, give light diet, keep the bowels loose and abstain from irritating exercises, such as riding on horseback. Bromide of potash often acts beneficially. If the prepuce is long, circumcise it; if there is rectal irritation, as piles, fissure, etc., appropriate treatment must be applied for them. Passing large bougies, and the local application of nitrate of silver, gr. x or xx to one ounce, are also useful. The depressed mental condition of the patient must not be neglected, as very much depends upon his intelligent co-operation in the treatmeat.—*Med. and Surg. Rep.*

TREATMENT OF ECZEMA.—In the *Lancet* of June 2, 1888, Dr. J. A. Wetheral states that, having himself been a sufferer from recurrent chronic eczema for a number of years, he has naturally taken great interest in all pertaining to it, and believes that he has discovered a new method of treating the disease. The following is an abstract of his plan of treatment:

i. *Medical Treatment.*—(a) External. He dips pieces of lint, sufficient

to surround the fingers separately, in pure liquor carbonis detergens, and applies them, surrounded by gutta-percha tissue, at bedtime. They are allowed to remain on all night. Considerable smarting is at first caused, but it soon disappears. On removing the lint in the morning the skin looks sodden, the former vesicles are often raised into small bullæ, which, however, ere long get absorbed and dry up. During the day the hand is left exposed to the open air, or, better still, kept gloved in thin kid. They are washed every third day with lanolin coal-tar soap. To render the skin more pliable and soft a little lanolin is rubbed in every morning. In the course of three or four days the upper hardened cuticle comes off, in some cases as a whole, in others in large flakes, leaving a clean smooth surface, healthier, with more tonicity in it, and not so subject to undergo the catarrhal multiplication so characteristic of eczema. When such redness or heat exists, or there is any acrid discharge, or the implicated surface is extensive, we may moderate the strength of the alcoholic solution of coal tar by mixing it with (1 to 10 or 20) cold water; or the alkaline bathing, to be presently mentioned, may be tried. If there are only a few vesicles, he has often touched them over with a little pure carbolic acid, so as to bring away a mere shell of epidermis of limited area.

Let us now briefly review a few of the other local methods adopted. As to ointments—*e. g.*, of bismuth, zinc, etc.—all are like the tar method to Hebra, simply disgusting. Even the lowest menial does not care to parade the streets with his fingers or hand bandaged up with so many white linen rags, to say nothing of the small amount of relief producible. Huile de cade or oleum rusci pyroligneum painted over the parts every day or two will soon dispel an ordinary case; but what about the, to most people, disgusting smell?

The treatment verily is worse than the disease. Bathing with saline or alkaline waters, such as are found at Harrogate, Bath, etc., alternating or combined with the application of spirituous alkaline lotions, the writer has great faith in, especially where the disease is extensive or there is much exudation—*e. g.*, in eczema rubrum—or the case is intractable to other means. Watering-places and the seaside, however, are not always near; nor could the patient always afford to go to them. The various gelatin, collodion, or other impermeable coatings, he considers worthless.

(b) Internal. Drugs, as such, are not required. To speak of treating the gouty or rheumatic diathesis by colchicum, etc., is simply ridiculous. Such terms as these should, in Dr. Wetherell's opinion, be abolished, or applied only where actual attacks of gout or rheumatism exist or threaten. Should we not rather speak of such as a "constitution with a tendency to excessive formation of uric acid," or even as "*uratic*"? To give large doses of arsenic is sheer waste of material. Very small doses often dispel scaliness; but it should only be administered in the form of some mineral water, as La Bourboule, Woodhall, etc.

2. *Dietetic Medication*.—Avoid stimulating and indigestible substances, as pickles, tea, etc. In other words, the chief materials of diet should be lean meat, milk, or cocoa at breakfast, old bread, fresh vegetables (except starchy bodies, as potatoes); no pastry. Avoid all that disagrees, especially beer and malt liquors.

3. *General Indications*.—Cleanliness in everything is very essential; clothe and diet the patient according to the changing season; air and exercise, and by these means alone regulate the bowels and other emuctories.

In spite of all rules, cases now and then occur which withstand all treatment, baffle every effort, and cling to

the sufferer for a lifetime. Such must be attacked on general principles. The plan can not be a stereotyped one.—

The Therapeutic Gazette.

SOME STATISTICS REGARDING THE LOSS OF HUMAN LIMBS.—According to the Treatise on Artificial Limbs, published by A. A. Marks of New York, out of the 8606 orders for artificial legs and arms filled by him, the records of only 3500 were sufficiently full to enable him to tabulate for statistical purposes.

Of all the artificial limbs made by him 85 per cent. are legs and 15 per cent. arms. The small percentage of arms he explains by the fact that fewer persons who have lost their arms supply themselves with artificials, than those who have lost their lower extremities, inasmuch as it is easier for a man to go through this world with one arm than with one leg.

Of all the legs taken into consideration 49 per cent. are right, 46 per cent. are left, and 5 per cent. both.

Seventy-eight per cent. of legs amputated are males, and 22 per cent. females. Both sexes are more disposed to lose their right leg than their left, and this difference is much greater with females than males.

The proportion of double amputations for males is nearly twice that for females, and is accounted for by the greater jeopardy of the males.

Over one-half of all the amputations are between the knee and ankle, with a larger percentage for males.

The percentage of deformity is more than double in females than in males.

Females lose more legs from disease than all the other causes combined.

With men one-third are the results of war, and nearly another third the result of railroads. Twelve per cent. only are the results of disease.

Next to disease, females lose more legs from railroads than any other one cause.

Of all the arms manufactured by him 92 per cent. are for males, and 8 per cent. for females.

Over one-third of all the deficiencies of the upper extremities with females are the results of malformation.

With males the loss of arms from results of war amounts to 24 per cent., from railroads over 12 per cent., and from the falling of bodies over 10 per cent.

In his final classification he shows that the largest percentage for those with artificial legs is for farmers, and the next for workingmen at the bench; these two combined nearly cover one-third the entire list.

Less than one-third of those with artificial arms pursue sedentary occupations, leaving over three-fourths to be divided among occupations requiring manual and physical effort.

This exhibit strikes one forcibly of the utility of artificial limbs.

He closes his chapter on statistics with Shakespeare's "King Henry VI." "Would ye not think that cunning to be great that could restore this cripple to his legs again?"—*Med. Brief.*

HAY FEVER AS A DISEASE OF CENTRAL NERVOUS ORIGIN.—In the *New York Med. Record*, July, 1888, p. 32, Dr. Kinnear presents an hypothesis in which he attempts to show that hay fever, in its immediate symptoms, may be accounted for by an abnormal condition of central nerve-cells.

Reasoning by analogy, the author considers that the nervous centres furnishing nerves to the apparent seat of the disease are in an abnormal condition and constitute the primary disease. In order to draw away the blood from these hyperæmic nerve-centres, Dr. Kinnear applies an ice-bag to the spine from the fourth cervical to the second or third lumbar vertebra, two or three times a day for an hour or more each application. This causes a dilatation of the arterioles throughout the whole

body, evenly distributing the circulation and withdrawing from the excited nerve-centres their excesses of blood. Some cases are recorded in which marked success attended this plan of treatment and a further trial of it is strongly recommended.—*London Med. Recorder*.

CREOLIN AS AN INTERNAL MEDICINE.—Dr. A. Hiller, Privat Docent in Breslau, publishes some remarks on this subject in the *Deutsche Med. Wochenschr.*, July 5, 1888. The antiseptic properties and comparative innocuousness of creoline, as used externally, have been made known by Frohner and E. V. Esmarch, and their conclusions are also confirmed by Dr. Hiller. But creolin is of the greatest use in various diseases of the stomach and intestines. Its anti-zymotic influence comes out most clearly when employed against the numerous processes of fermentation and decomposition which accompany most, if not all, such diseases. "Its freedom from poisonous effects, and its perfectly non-irritant effects, make it an ideal antiseptic for the above group of diseases." Dr. Hiller asserts that creoline, given in strong gelatine capsules, in doses of between three and fifteen grains three times a day, promptly and certainly relieves meteorism from whatever cause, whether constriction, typhlitis, catarrh, atony, or ileotyphus, and hopes thus to prevent perforation in the latter case. It was found equally efficient in simple flatulence, gastric dilation, acute and chronic gastric catarrh, and diarrhoea. Given in a case of *tænia* and one of *oxyuris*, its action was prompt and efficient as an anti-parasitic. But creoline appears unfitted for children, owing to their inability to swallow capsules. Creolin may also be used to irrigate the rectum in carcinoma cases; used thus in solutions of 1 in 500 it acts like a charm in purulent cystitis (Jessner, *ibid.*, 1881). This glowing account by

Dr. Hiller ought to call attention to this substance.—*British Med. Journal*,

WHERE THE WATER COMES FROM.—Continued pumping at a well lowers the ground water level in the earth for a distance of from 100 to 1,000 feet, varying with geological formation and the water supply. Hence, the greater amount of water taken from a well, the greater distance is the water drawn through the earth and the greater the chance of pollution.—*Owosso Water Report*.

BRIGHT'S DISEASE.—John Bright was born in 1811. He made a tour of the Holy Land at the age of 24, but did not desire to purchase it, owing to the existence of a flaw in the title. On his return from the Orient he discovered that what was most needed both in Europe and America was a good reliable disease for the better classes. The poor and humble were well supplied, but the rich, the aristocratic and patrician statesmen, corned heads and porkists of the two lands, languished for a good reliable disease that poor people could not obtain. So he began to sit up nights and perfect Bright's disease. He gained the prize at the Paris Exposition, and honorable mention at the great Centennial celebration at Philadelphia, for "meritorious and effective disease for the better classes." Since that time he has been gratified to notice that the very best people, both in his own land and in this, are handling Bright's disease. It has been kept out of the reach of the poor, and to die from this ailment has been regarded as a proud distinction.—*Bill Nye's Biography of Noted Men*.

SHE MADE IT WARM FOR HIM TOO.—Young Wife—John, mother says she wants to be cremated.

Young Husband—Tell her if she'll get on her things I'll take her down this morning.—*Canadian Lancet*.

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ORIGINAL COMMUNICATIONS.

A REPORT OF SEVEN CASES OF VAGINAL HYSTERECTOMY —TECHNIQUE OF THE OPERATION.

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The method adopted in performing these operations illustrates the fact that the technique of colpo-hysterectomy is undergoing a transition stage. It emphatically illustrates the advantage of compression forceps over ligatures in haemostasis.

CASE I.—Mrs. S., æt. 47, mother of nine children, always well, presented herself February 1, 1887, with epithelioma of the cervix uteri. It did not involve the vault of the vagina; the broad ligaments did not seem to be thickened. Mobility of the uterus was complete. After preparatory treatment with a daily laxative and diuretic for a week, the operation was performed on February 8, 1887.

The cervix was easily drawn down to the vulvar orifice, and, with scissors, its vaginal attachment was divided. Strong adhesions to the bladder and rectum were found, and in consequence thereof the rectum was opened in one place and the bladder in two places in the process of freeing the uterus from these two organs. After the two broad ligaments were sufficiently isolated and the fundus was turned backward and brought down, the left broad ligament was first penetrated and di-

vided into two sections with heavy ligatures, and tied securely as hands could tie them. It was then severed as closely to the corpus uteri as possible, and the whole organ came out of the vagina. Treating the right broad ligament similarly was a much easier matter, because the uterus was down and out of the way. This attachment was at once severed, and the whole organ was then freed from the patient. The ovaries were then removed. The rent in the bowel was then closed by continuous suture without difficulty. The longer rent in the bladder was then closed by continuous suture; but it was done at a great disadvantage from its peculiar position, back of the symphysis and looking directly backwards. To draw down the bladder and so evert the edges of the rent as to apply the stitches was a delicate and difficult task. The smaller rent, undiscovered at that time, was not closed. Just as this sewing up was completed there was observed a welling up in the shapeless excavation left after the removal of the uterus, great quantities of arterial blood. Which broad ligament it came from it was impossible to decide. After a long time the bleeding

vessel, which was in the right broad ligament, was secured, but not until a ligature was pushed off of the left broad ligament. All vessels were eventually secured, but not till a great quantity of blood had been lost. The top of the vagina was closed from before backwards with continuous suture, the ligaments were brought down, iodoform gauze stuffed into the vagina and the patient put to bed.

Reaction followed reluctantly. She died from peritonitis and exhaustion in forty-five hours, having passed eight ounces and one drachm of urine in the meantime. The autopsy revealed a small rent in the bladder, which was concluded to be the cause of the peritonitis.

CASE 2.—Mrs. C., æt. 36, laundress; tall, spare, nervous, sanguine temperament, presented herself February 10, 1887, with a small epithelioma in the cervix uteri. The upper portion of the vaginal cervix was not invaded. The operation was performed on February 25, 1887.

The uterus was easily drawn down to the vulvar orifice and freed from its vaginal attachment with the scissors. The bladder was closely attached to the uterus, and before its complete separation was accomplished it was opened. The opening into the Douglas cul-de-sac was easily effected and the fundus rocked backward through the sacral hollow, down and out through the vulva. The broad ligaments were tied with silk ligatures and the uterus removed after its separation from them. The ovaries were separately removed immediately afterwards. In closing the vesical rent the left broad ligament shed

its ligatures and bled profusely. Hemorrhage was soon checked. The vagina was closed from before backwards, the ligatures were brought down into the vagina, and the latter organ was filled with iodoform gauze.

The patient rallied well. The temperature rose to 100° on the second and third days. Thereafter nothing worthy of special mention occurred. On the tenth day an elastic ligature attached to the patient's left thigh was tied to those protruding from the vagina, and in five days they began to come away, and in forty-eight hours the last one was removed. In thirty-six days she left the hospital.

CASE 3.—April 13, 1887. Mrs. C., æt. 49, widow; last confinement twenty-eight years ago; she is still menstruating. Examination reveals an epitheliomatus degeneration of the cervix with about $\frac{1}{4}$ inch of uninvaded tissue of the cervix between the cancer and the vaginal vault. The uterus was about four inches deep, and it bled freely upon withdrawing the sound. The fundus was large and was easily felt through the abdominal wall. The uterus was freely movable, indicating the non-implication of the lymphatics in the broad ligament. The absence of invasion of the vaginal wall and of the circum-uterine tissues led to the recommending of an operation for the removal of the entire uterus.

From April 19 till May 5, the date of the operation, she took cascara daily, and digitalis and acetate of potash. The condition of the excretions seemed as nearly perfect as possible preparatory to an operation. The patient slept in the hospital the night before the opera-

tion, and took the customary general antiseptic bath and had administered several vaginal bichloride douches.

Operation.—The cervix was drawn into the vulva with two large, lock vulsellum forceps, while the vaginal attachment to the cervix was divided with the scissors. Gradually and patiently the circum-cervical tissues and the attachments of the bladder and rectum were crowded away with the finger nail till the Douglas cul-de-sac could be opened. Then it was found quite impossible to reach the top of the fundus with the fingers. The cul-de-sac of peritoneum between the bladder and the uterus was then opened, with hope of being able to retroflex the uterus by means of the fingers placed before and behind the uterus. This manœuvre was found likewise to be an impossibility. After repeated vain attempts to reach the top of the fundus with the fingers, that method was abandoned. Trial of very deep supra-cubic pressure to thrust the fundus back towards the sacral hollow, and at the same time of grasping and pulling down the fundus with a small vulsellum forceps thrust through the Douglas cul-de-sac at last succeeded, after three or four tearings out of the forceps, in getting the top of the uterus out into the world.

Snap forceps were then placed on the broad ligaments and the latter divided. The subsequent dressing consisted in tucking a thin layer of iodoform gauze into the vagina, care being taken to avoid separating the top of the vaginal walls. The danger of this separation must be patent to every observer. Ribollet attributes the death

of one of his patients to crowding too much gauze into the upper vagina.

No stitches were used to close the upper end of the vagina. Its borders were permitted to collapse and to close in any position that they chanced to occupy. One ligature was used for a vaginal artery. No attention was paid to it in the final dressing. The ovaries were both removed after the uterus was finally separated from its attachments.

The patient reacted well from the shock of the operation, which consumed seventy-five minutes. Her daily progress was so uniformly satisfactory that any detailed descriptive statement of it would be monotony itself. The pulse ranged from 90 to 120 beats per minute. It was 98 when she left the hospital. The temperature reached 100° one morning only, and on five evenings, from third to seventh day inclusive.

The forceps, one pair on each ligamentum latum, was removed at the end of forty-eight hours. I saw Mrs. C. fourteen months after the operation and she was the picture of health. She had filled her position as matron in a boys' reformatory school for a year and was, to all appearances, perfectly well.

CASE 4.—Came to me in October, 1887, for an incoercable hemorrhage from a small fibroid tumor in the posterior uterine wall. The patient, a woman 47 years of age, has borne eleven children, and has been having hemorrhage for eleven years. Everything in the way of medicine has been tried. The uterus has been curetted upon two different occasions, and she

came to me supposing the ovaries must be taken out. I explained to her that I had had two cases of removal of the ovaries for uterine hemorrhages, but that the operation had not cured them. I also explained to her the danger of removal of the uterus and she consented to the operation. The steps were simplicity itself, being a repetition of what I have given. The cervix was easily drawn down to the vulvar orifice, and the cervical attachments freed at once as speedily as possible. An incision was made in the cul-de-sac of Douglas and I was able with a knife to divide the tissues without any trouble. When the two broad ligaments were all that supported the uterus they were secured with long snap forceps, and the broad ligament divided on the right and left sides. Snap forceps were then put on the neighboring deep vessels. That was all the haemostatic means that was resorted to from beginning to end.

She left the hospital in five weeks in a satisfactory condition. Nine months afterwards she reported and I did not recognize her. She had rosy cheeks and had gained twenty pounds in weight. Her old strength and energy had returned.

CASE 5.—Patient 47 years of age. Cancer of the cervix uteri involving a small amount of the vagina. The cervix was easily denuded and the broad ligaments grasped with the compression forceps, and the uterus cut away. The lymphatic glands in the left broad ligament were involved. This patient will die of cancer probably, but her death will be much less distressful than

it would be if she had had no operation performed.

CASE 6.—Patient 37 years of age. Operation performed at the Presbyterian Hospital, April 16th (circ.) 1888. The patient when eight months advanced in her pregnancy, was standing at the front gate one morning in the hot sun in August, 1887, and all she remembers is, that suddenly she had queer feelings and went into the house.

The next thing she knew, friends came in and were looking at the great amount of blood under the bed. It seems that she had grown delirious, and, feeling something in the vaginal region, had thrust her thumb and finger into the vagina and caught hold of the cervix, and by main force had torn away a piece as long as two fingers of my hand, leaving it hanging in the vagina. The next day the attending physician amputated the piece and the woman went on to full term, and was regularly delivered. During the month of March, 1888, I saw her, and right in the angle from which was torn this piece was a mass of sprouting granulations that were subjected to microscopic examination and were pronounced cancer. This case was laid before the patient and immediate hysterectomy advised, which was agreed to. This case, which was my sixth, illustrates one of the unpleasant features of taking out the uterus through the vagina.

The patient was placed in the extreme lithotomy position, a vaginal retractor put in over the perineum and drawn down; large lock vulsellum forceps were placed on the cervix, and the

latter was drawn down as far as possible. Dividing the vagina from the cervix with the scissors was an easy matter, and then separation of the tissues all around from the cervix with the finger nail was easily accomplished. Large snap forceps were placed on the left broad ligament. I found I had not sufficiently freed the uterus from the rectum, and cut a little with the scissors, doing a thing I will never do again. I thus reduced the size of the right broad ligament sufficiently to be grasped with another forceps. The uterus was removed in eleven minutes, but I spent three-quarters of an hour trying to arrest hemorrhage. It seemed as though every shred of divided tissue was bleeding.

After my first case of hysterectomy I had constructed a very large retractor, whose blade is five and one-half inches long, two and one-quarter inches wide, with a suitable handle placed at right angles. The retractor was introduced into the vagina, flat surface downwards, and the anterior wall of the rectum was perfectly exposed, and the bleeding artery was quickly found and seized. I had cut it off in freeing the rectal attachment to the uterus with the scissors. Forceps were placed upon this vessel, which completed the arrest of the hemorrhage, and the patient was put to bed after tucking in some iodoform gauze thoroughly around the forceps, which were left there. In addition to the two large lock forceps I left thirteen others in the wound, which were taken off in twenty-four hours. The larger ones were taken off in forty-eight hours. The patient had no bad symptoms and

left the hospital in three weeks and two days.

CASE 7.—Operation at the Presbyterian hospital May 6th, 1888. The patient, 42 years of age and a Scandinavian, had borne several children. The attending physician had curretted the inside of the uterus for hemorrhage, and had succeeded in getting away a pretty large piece of something, which he sent to the pathologist of the University of Michigan, who sent it back with the report that it was a rapidly growing carcinoma. The removal of the uterus was determined upon. This organ was small in size, and when exposed and drawn down with the vulcellum forceps, it was brought easily to the mouth of the vagina. The vaginal wall was separated and the uterus brought down and removed in seven minutes. Four forceps only were used in this case, the hemorrhage being easily checked, presenting a marked contrast to the preceding case. The patient was taken out of the operating room completely dressed and ready for bed, in thirty-two minutes after the commencement of the operation. No attempt at celerity was made in prosecuting the operation. She recovered without a bad symptom. The forceps were taken off in forty-eight hours. There was no rise of temperature except in the afternoon, when it would go up to about 100°, and then go back again in the morning, showing that there was no blood poisoning present. There was one peculiarity in this case. The operation was done at 10:30 o'clock Sunday morning. Orders were left to catheterize the patient every six hours. She was catheterized shortly after the

operation, but no urine was drawn, and again at 6 o'clock, without result. Just before completing these operations it is my custom to inject a solution of milk and water into the bladder for the purpose of detecting any rupture of the bladder, and it revealed that the bladder was not ruptured. I knew, also, that I had not included the ureters in the forceps, because I had kept too far away from them; therefore I felt that it must be a suppression of urine. I saw the patient that night between 9 and 10 o'clock, and the nurse said the only thing she complained of was pain in the back, referred to the renal region. Poultices were ordered, and the next morning at 6 o'clock she was catheterized and a drachm and a half of urine only was obtained. A hypodermic injection of half a grain of pilocarpine was then administered, and I catheterized her four and a half hours later and drew off fourteen ounces of urine. With the exception of that one apparently bad symptom, the patient had an uninterrupted recovery.

The report of the foregoing cases shows that the mortality of colpo-hysterectomy is not necessarily high, and that it is a comparatively safe operation. A careful investigation of the literature of the subject leads to the following remarks on the

INDICATIONS FOR VAGINAL HYSTERECTOMY.

(a) Ten years ago, and, indeed, until quite recently, the chief indication for the performance of vaginal hysterectomy was malignant disease. At present it is agreed by all operators that the earlier it is performed for cancer the greater are the chances for its

non-recurrence. This dread malady always returns sooner or later after amputation of the uterine cervix, and of course proves fatal; whereas, when the whole organ is removed, the patient is given the only hope of permanent recovery. Hysterectomy does not always prevent recurrence of this neoplasm, yet it offers the best results. Indeed, it is far better to perform colpo-hysterectomy were we positive that it would develop later, because the death from cancer after this operation is infinitely less loathsome than it is without its performance. Where the broad ligaments are much involved and uterine ankylosis exists, the operation should be avoided, because haemostasis is very difficult, and secondary hemorrhage is more likely to occur because of the necrotic character of the tissues carrying the blood supply.

(b) *Procidentia Uteri* is another condition for which this operation is performed. Anaplastic operations do not always restore the organ to its normal level. Artificial vaginal stenosis to the extent of the non-admission of the little finger has failed ultimately to relieve the procidentia through gradual dilatation of the vaginal channel.

(c) Fibrous bodies of the uterus which offer the point of departure for serious irregularities have constituted a cause for vaginal hysterectomy. Of course reference is had to small tumors. Heydenrich reports four cases of operation with four successes. He considers that at present it is impossible to pronounce upon the relative merits of vaginal hysterectomy and of castration for small fibrous bodies in the uterus. Péan recently reports a case of the

same operation for multiple fibroids.

(d) The hystero-neuroses (inveterate dysmenorrhœa, neuralgia, convulsions, etc.), for which oophorectomy is so often performed, Péan considers a justifiable cause for this surgical procedure. His reasoning is, that these neuroses sustain an intimate relation to the uterus itself, consequently the uterus should be included along with the tubes and ovaries.

(Caldwell. Paris letter in *Chicago Med. Jour. and Examiner*, February, 1887.)

THE TECHNIQUE OF VAGINAL HYSTERECTOMY.

The method of performing vaginal hysterectomy is by no means settled. It has been so recently added to the list of gynecological operations that its technique is changing very much. Indeed, gynecologists change their methods of performing this operation very rapidly. One year ago it was no uncommon thing to read that gynecologists were one and one-half to three hours in completing a vaginal hysterectomy. This paper will describe a method requiring in simple cases one-third to one-sixth of the time formerly required.

Much has been written upon this subject that will soon become obsolete. A great many steps in the operation formerly taken are, to say the least, quite unnecessary. As a rule, all stitches and ligatures are wholly superfluous; indeed, they can be regarded as sources, to a certain extent, of sepsis. Observation would seem to indicate that the danger of septicæmia from the vagina is over-estimated. In December, 1886, I presented to the Chicago Gynecological Society for examination a case of

Anterior Vaginal Enterocele, which was being treated with a Fowler pessary. Subsequently she wore a Fowler pessary with a flat plate of hard rubber laid across the anterior two-thirds of the fenestrum of the support. The edge of the plate cut an opening into the enterocele about three-fourths of an inch long, through which the peritoneal fluid oozed continually. Into this opening a small sound was introduced five and one-half inches up into the peritoneal cavity. The vagina possessed all of its pristine septic nastiness, and yet the patient, with every generally accredited facility for acquiring septic peritonitis, failed utterly to develop a symptom of that dread malady. This case would seem to indicate that our sharp fears of vaginal septic infection of the peritoneum in opening it through the vagina need reorganizing.

In this, and as in all other surgical procedures, the motto "Simplicity and Effectiveness" should be the guide. The complexity of proceedings of some reported operations would be ludicrous were the subject not so serious, when one considers the very few plain steps that are necessary to perform a vaginal hysterectomy satisfactorily.

Before operating, the bowels and bladder should be evacuated and ample antiseptic douching of the vagina, repeatedly used for twenty-four hours, should be performed. When much necrotic cervical tissue exists it may be thoroughly removed with the curette forty-eight or seventy-two hours before operating. If extreme antiseptic precautions are desired the vaginal walls can be thoroughly covered with iodo-

form twelve hours before the operation. Just before beginning proceedings, after anesthetizing the patient, a protracted hot bichloride douche can be used. It contributes to diminish the hemorrhage.

The best position to put the patient in, is the extreme perineal lithotomy position. Some gynecologists place their patients in the extremely awkward left lateral decubitus.

The various steps in this operation consist in:

1st. Separating the uterus from its surroundings.

2d. Hæmostasis, and

3d. The subsequent dressing.

i. FREEING THE CERVIX.—In the great majority of cases, the vagina is sufficiently patulous to permit the ready removal of the uterus. In exceptional cases it is narrow and apparently undilatable and causes an infinitude of embarrassment to the operator. This obstacle to facile procedure can be easily overcome by dividing the perineum sufficiently to afford all desirable space. I know of no special preference of locality for making the perineal incision.

The cervix must be drawn down with forceps into the vulvar orifice if possible, and the vaginal attachment severed with any cutting instrument, a bistoury, a blunt or sharp pointed scissors. Some operators prefer one instrument, others another. It is a trifling choice to make between them. A large, locking, three or four toothed vulsellum will answer every purpose for drawing down the cervix. It will close the os very compactly, thus avoiding the necessity for plugging the

cervical canal to prevent the exit of uterine secretion. The vulva should be held open laterally by retractors deftly held just within the ostium; if they are thrust into the vagina too far they prevent the forced descent of the uterus. If they are wide enough a perineal retractor is unnecessary. When the *ostium vaginae* is widely patent the retractors are not necessary. Just before making the initial cutting it is well to push up the cervix (which has been drawn down) to its natural level and mark with the eye where the vagina is attached, and then draw down the organ and begin proceedings. This point is rather important because no one can tell where the vaginal wall terminates and the cervical covering begins, and one is invariably inclined to begin the denudation too far away from the cervix, and thus to open the bladder.

The mucous membrane should first be severed from the cervix in its entire periphery. The process of enucleating the cervix from its surrounding cellular tissue can then be best prosecuted with the finger nail or any blunt instrument capable of dividing such tissues. A small experience soon enables one to prosecute this enucleation with the fingers easily.

The greatest diversity exists in different women as to the distance from the vaginal vault to the peritoneal cavity. Without especial attention being called to this subject, one would suppose this distance to be pretty uniform. There is no means of determining its extent before operating. This variation in peritoneo-vaginal space has led to the very common remark in reports

of cases, that the "adhesions between the bladder and the uterus were very extensive." In some cases it is four to five times as thick as it is in other cases.

In freeing the uterus from its attachments the gravest necessity exists for keeping exceedingly close to the cervix anteriorly, otherwise the operator will find that he has opened the bladder almost before he has any idea that he is dangerously near it. By keeping as closely to the cervix as possible another important, nay vital, advantage will be gained, viz: the avoidance of wounding the ureter, which perforates the bladder just above the middle of the anterior vaginal wall. Wounding this duct complicates matters most woefully in that it necessitates the extirpation of the kidney. The surest way of determining the dangerous proximity to the ureter is to discover the pulsation of its accompanying artery, which is a branch of the uterine artery and is of considerable magnitude. Absolute safety from wounding this important channel is guaranteed to him only who keeps closely enough to the cervix in its denudation. Very soon the finger can be made to penetrate the peritoneal cavity as will be indicated by its feeling the fundus covered with the stomach peritoneum. The freeing the posterior cervical wall should be prosecuted with the same care to remain close to the uterus and thus avoid opening the rectum. The finger easily penetrates the Douglas cul-de-sac and the body of the uterus can then be explored readily. Up to this point, when the peritoneal cavity is opened the hemorrhage is considerable though not at all alarming.

It is best to proceed as rapidly as possible and not to attempt to check it. Generally speaking, torsion is all that is necessary to arrest hemorrhage from the arterial branches severed in this part of the operation. Furthermore it will be found that the loose vaginal tissue, separated from its cervical attachment, very soon retracts and diminishes, or wholly checks, hemorrhage from the majority of the smaller severed vessels. When the severed artery has a firm groundwork of origin, as on the anterior wall of the rectum, torsion or force-pressure is advisable.

Martin first opens the peritoneum through the cul-de-sac of Douglas sufficiently to admit the finger, which he uses as a guide for a much curved needle with which he sutures the vaginal wall outside of the opening to the peritoneum above. About five such suturings are used posteriorly to the cervix. Similarly opening the ante-uterine peritoneal space, he sutures the vagina to the peritoneum with four sutures. Throughout his operation he uses sutures and ligatures freely. And yet he says that hemorrhage "can be very voluminous even if the parts have been prepared by continuous suture." Such "very voluminous" hemorrhages can be avoided by avoiding this cumbersome and awkward suturing by using force-pressure on bleeding vessels.

In separating the cervix from its cellular surroundings, cutting instruments ought to be avoided as much as possible, because the persistence of hemorrhage is greater from vessels that are cut than from vessels that are torn across.

It is a curious fact that in some cases

the vascular distribution to the parts invaded by this operation, seems to be vastly greater than it is in others. In such cases every particle of divided tissue seems to bleed to excess. Experience with a very few cases verifies this statement. In some cases the two compression forceps on the broad ligament are all that are necessary in the way of haemostasis, no forceps being used elsewhere in the area of the large wound produced; while in other cases, several compression forceps are necessary in addition to the two just mentioned. In the sixth case (of the seven cases upon which this paper is founded) thirteen forceps were used, in addition to the two forceps on the broad ligaments.

Occasionally the peritoneum is tough and cannot be perforated by the finger; then a blunt pointed pair of scissors, closed, can be thrust into the cavity, quickly opened and withdrawn, leaving an opening large enough to admit the finger. The resistance of the peritoneum to the tearing by the finger will be increased in proportion to the amount of inflammatory invasion of that surface. Where perimetritis has not existed previously, the peritoneal cavity is opened with the finger very easily.

After opening the posterior cul-de-sac some operators push a small sponge into the peritoneal cavity, to remain there till the operation is terminated, for the purpose of preventing the entrance of septic material and of keeping the bowels up and away from possible injury. It also serves the purpose upon its withdrawal of drawing down the ragged edges of the peritoneum, so that

in the wound peritoneum lies apposed to peritoneum, a most desirable position to be secured.

When the uterus is not greatly enlarged, the best method of procedure is to separate the cervix all around as high up as can be done before opening the peritoneal cavity, then the peritoneum should be torn through the cul-de-sac of Douglas. Through this opening the left fore finger can be thrust and brought forward over the top of the fundus or hooked over either broad ligament and pressed down into the vesico-uterine fossa as a guide for opening the peritoneum at that point. The advantage of this proceeding when not prevented by uterine hypertrophy is very great, in that it contributes greatly to avoiding opening the bladder and avoiding wounding the ureters. With an opening safely made into the peritoneal cavity, both before and behind the cervix, all peritoneo-cellulo-adipose attachments of the uterus can be quickly severed clear out of the broad ligaments upon both sides, leaving the organ suspended only by these ligaments.

At this point two proceedings lie open: One is to bring the fundus down through the anterior cul-de-sac, or through the posterior cul-de-sac, *i. e.*, to acutely and completely flex the uterus, and the other is, to let flexion entirely alone and to proceed at once with the treatment of the *ligamenta lata*, with reference to preventing their vessels from bleeding and dividing them, and thus freeing the uterus wholly from its attachments. Another plan resorted to before removing the organ has been, after securing the broad liga-

ments, to bisect the uterus from os to fundus, and to remove each half separately. It must be a very exceptional case demanding this proceeding. When the uterus is small, flexion is an easy matter. When it is large it is a very difficult matter, and when very large it is a feat impossible to accomplish. A blunt pointed curved scissors can be used in the uterine cavity to bring down the fundus sufficiently low to grasp it and effect retroflexion. Often it can be retroflexed only by grasping its posterior wall with a vulsellum forceps, through the opened cul-de-sac of Douglas, and drawing it down a little way, and then grasping it again with a second vulsellum forceps above the first one, thus repeating the graspings till retroflexion is accomplished. When the uterus is not enlarged and the tops of the broad ligaments can be easily reached, flexion is wholly unnecessary. The ligaments can then quickly receive their force-pressure and the time of operating be abbreviated.

C. Staudé recommends opening the Douglas cul-de-sac first and retroflexing the uterus completely before opening the vesico-uterine cul-de-sac, in order not to permit the cancerous cervix to enter the peritoneal cavity as the fundus is brought downward. The ante-uterine peritoneal space thus shut off will effectually prevent the cervix extering it. However, with the cervix firmly held by the vulsellum* forceps it is impossible for it to ascend into the peritoneal cavity as the fundus is brought down. Furthermore, if the ante-uterine peritoneal space be not opened, the work of secur-

ing the lateral vascular supply must be greatly embarrassed, and the danger of wounding the ureters greatly, almost infinitely, increased.

The second step in the operation consists in haemostasis, and it includes securing and dividing the broad ligaments.

The devices that have been used to secure haemostasis are almost legion. Until very recently silk ligatures only were used to secure the whole mass of the ligaments or to secure it in separate divisions by the continuous or by the loop method. Later the ecraseur, wire or elastic ligature has been used. A separate catgut ligature for each tube has been recommended. Needles with a great variety of curves have been devised. The application of ligatures is attended with much difficulty, often failing in the most skillful hands. They cannot be other than a possible source of septic infection to the peritoneum. Sometimes they are in the wound two or three weeks before coming away. Often it is necessary to attach to them an elastic ligature anchored to the thigh before they can be removed. They are wholly unnecessary and in every way are infinitely inferior to the compression forceps. They prolong the operation greatly. Illustrative of this fact may be mentioned the length of time consumed in operators using them. It is no uncommon thing to read of operations, wherein ligatures are used, consuming one and one-half to two and one-half hours. One operator consumed three and one-half hours in completing his operation. In the sixth case of the seven upon which this

*¹ Deutsche Med. Wochenschrift, Berlin. 1886; xii., 602-604.

paper is based, the uterus was removed in eleven minutes. In the seventh the uterus was removed in seven minutes, and the patient was taken back to her bed, after the wound was dressed and bandage adjusted, in thirty-two minutes. Both patients made rapid uninterrupted recoveries. In neither operation was any attempt made to expedite matters.

In addition to being a perfectly reliable method of hæmostasis, the forceps afford perfect drainage.

No originality is claimed for this use of the pressure forceps. It is simply an application of a method comparatively old in surgery. Snap forceps are often left in wounds for hæmostasis, as for example, in cases of extirpation of the rectum, and even in cases of laparotomy. Before using them it is always well to test the ratchet and ascertain whether they will hold permanently. In one of my large lock forceps the swivel post was broken off in a severe compression of it. Once a shank of a pair of forceps broke while I was removing it the second day after an operation. Occasionally forceps will unsnap, and a greater calamity cannot befall an operator than to have that occur after leaving the patient. Tying the forceps together when in doubt about their liability can be done. They should be tested in every way to substantiate their integrity before the hour of operating. Not all pressure forceps will answer the purpose of hæmostasis in hysterectomy. Whenever the amount of tissue to be compressed is large, the incomplete pressure at the distal end of the jaws is a serious possibility of failure to accomplish perfect

hæmostasis. Sharp & Smith, of Chicago, have devised a forcep that answers every purpose. The bite of the distal end of the jaws is accomplished sooner than it is at the proximal end, through an ingenious curving of the upper jaw. The shank is large and strong and reliable.

After the peritoneal cavity before and behind the uterus has been opened and the uterus has been completely flexed, when possible, and is retained by the *ligamenta lata* only, the latter are ready to receive the forcipressure. With the forefinger of the left hand hooked over the superior margin of the left broad ligament the right hand can adjust the forceps to compress the whole width of the ligament and tighten the instrument to the last notch. It is best to attach it as near to the uterus as possible and yet leave room for dividing the ligament easily at its uterine end. While adjusting the forceps it is of course scarcely necessary to mention the desirability of not including in them a bit of omentum or a piece of intestine. I know of no greater satisfaction in gynecological operations that the operator can experience than in tightening hæmostatic forceps on a broad ligament—a satisfaction greatly intensified when one has previously had the appalling accident occur of the shedding of the silk ligatures after the broad ligament has been permitted to contract and withdraw into the pelvis up out of sight.

After the forcipressure on the left broad ligament is accomplished, the latter can be divided with the scissors. The whole uterus can then be drawn out of the vulva, and the right lig-

ment can be compressed and divided very quickly and the uterus be wholly removed.

When the uterus cannot be flexed, the forceps must be applied in the best way that can be devised. With a much enlarged uterus the forceps can be applied to include broad ligament to the extent of the width of its jaws, that amount of broad ligament can be divided and up through the divided segment another pair of forceps can be pushed to include the remainder of the ligament, which in turn can be divided. When the finger cannot reach the superior margin of the ligament, the lower section of each ligament can be seized and divided, when it will be found that the whole organ can be made to descend and thus the entire ligament upon each side can be divided. When this procedure is necessary the difficulty of practicing it is greatly increased because of the narrowing of the vaginal space.

After removing the uterus the parts should be allowed to retract in order to allow any vessels to bleed that are prevented from it by their traction. By this means arterial twigs are often discovered which otherwise escape detection. All further arresting of hemorrhages can be accomplished easily with forceps. This step in the operation is of vast importance, since hemorrhage can not only result fatally, but even when not large it can become the unsuspected cause of a fatal peritonitis.

Before closing the wound it is well to inject warm milk into the bladder to ascertain whether the bladder has been opened. If it has been opened the rent can be closed with the contin-

uous suture of silk without much trouble.

The forceps on the broad ligaments can be removed in forty-eight hours. All other forceps can be removed at the end of twenty-four hours.

The last step in the operation concerns the management of the wound. The most elaborate sewing and draining of the vaginal cavity have been resorted to. Stitching the peritoneum to the vaginal wall is regarded necessary by some operators. Stitching the anterior marginal border of the rent to the posterior border and drawing the ends of the ligatures out through their centre, have been very commonly done.

Running a purse-string suture around the top of the vagina with a piece of rubber draining tube and the ligatures passing through the middle of the puckering, has been used.

Sewing up the vagina is wholly unnecessary in most cases. These various closings of the vagina have been regarded as essential to keep back the bowels and to prevent septicæmia through the vagina. Of the former there is a minimum danger. When the operation is completed the superior vaginal opening collapses as thoroughly and completely as the *ostium vaginæ* closes. The oozing apposed surfaces at once interdigitate and inaugurate the preliminary processes of union. They do not lie idle for twenty-four to forty-eight hours before commencing union is set up. At the end of forty-eight hours the top of the vagina is all closed to the passage of fluids, excepting through that portion of it occupied by the means of drainage.

The use of iodoform gauze in the

vagina is of the utmost importance and when wrongly used is a source of danger. The vagina must be absolutely aseptic, and herein the gauze filled with iodoform becomes of such great service. Stuffing the vagina too full of this agent keeps apart the walls of the

top of the vagina and prevents their union. After the removal of the forceps the gauze need not be used. Antiseptic vaginal douches twice a day are all that is needed.

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SELECTED ARTICLES.

LOCAL TREATMENT IN DIPHTHERIA.

BY J. HENRY FRUITNIGHT, A. M., M. D., NEW YORK.

The presentation of this subject to the New York Academy of Medicine last winter by Dr. C. E. Billington, and the discussion which it elicited, are a cause for gratification, inasmuch as they were most opportune. The subject was *apropos* because by many local treatment, if not avowedly discarded in the management of this disease, has been either tacitly neglected or imperfectly practiced of late. To borrow a phrase from the science of political economy, this *laissez-faire* policy is the result of what Dr. Billington has aptly stigmatized as an "optimistic" reliance upon the favorable issue in exceptional instances of the disease which had not undergone topical treatment.

It will not be controverted that diphtheria presents both local and constitutional symptoms, but the disputed question whether it is primarily a local affection followed by secondary constitutional symptoms or *vice versa* will not be discussed here.

If, then, we have these two factors presented to us in the evolution of the disease, our logical conclusion must be that we ought to treat these cases both locally and constitutionally, irrespective of whatever theory concerning the nature and development of the disease may be correct.

Most of the remedies used with the

intention of producing constitutional effects also, to a certain extent, act locally. I need but mention the muriated tincture of iron, chlorate of potash, and the bichloride of mercury as among the most prominent. You doubtless will be able to recall some others.

In the act of deglutition these remedies always come in contact with the vault of the pharynx, including the upper portion of the fauces, the tonsils, and the immediately adjacent parts. I always advise the patient, when he or she is old enough to do so, to retain the dose in the buccal cavity for several minutes before swallowing it, in order to get a more prolonged action from the medicine. In the exercise of this manœuvre I tell the patient to draw the dose as far back into the mouth as possible before swallowing. It is to be observed that this method is not that of gargling exactly, but rather an extension thereof.

In all of the recent discussions one remedy, which had been employed in this and other zymotic diseases formerly for its constitutional effect *alone*, but which I have used for its local action, has not been mentioned. I refer to the hyposulphite of soda.

Though, as I have just remarked, this remedy has already been used in the past for its constitutional effect, it is only recently that I have learned of its

efficacy as a local remedial agent. It is but just to say that the remedy was suggested to me by Dr. Brickelmaier, a laryngologist of repute in this city, in an informal conversation anent the various remedies which were used to act upon deposits and exudations in the throat. The doctor spoke so flattering-
ingly of the hyposulphite of soda that I determined to employ it in the next cases that I should be called upon to treat.

In the past year I have treated about thirty cases with this remedy, in the strength of one drachm to two ounces aquæ, of which the dose was one drachm for children under twelve months old, and to older children one drachm has been administered of a solution of the strength of one and one-half drachms of the medicine to two ounce of water. The remedy was administered every two hours. Several adults were among those afflicted, and the solution in their cases was of two drachms to the two ounces of water, of which the dose was one drachm. In the most of these cases I will say that the pseudo-membrane appeared in the upper portion of the pharynx or on the tonsils and uvula. In a few it extended a short distance down into the larynx. In these last cases the hyposulphite of soda was used sometimes in a spray atomizer, and in older children it was applied to the part affected with a brush. Where the patient is too young to comprehend the direction to hold the dose in the mouth, and the deposit is confined to the buccal cavity, here, also, it can be used in the atomizer.

What has thus far been said about the hyposulphite of soda has had reference to its use as a local remedy, but the medicine has also most probably a constitutional action. The hyposulphites, in common with the sulphites and bisulphites, have been used in

medicine in consequence of their hostility, by virtue of their acid component, to the lower forms of animal and vegetable life. Hence this group of remedies would seem to have a special action against zymotic diseases, under which category diphtheria is embraced; and, reasoning from these premises, physicians were led to its use in such constitutional diseases, and as a corollary thereto to regard it as a local antiseptic or germicide. But it is to its use as a topical agent that I would specially direct attention, disclaiming, however, that it will always cure and never fail, for there will always occur cases which will inevitably result fatally, no matter what may be done for them. Among my thirty cases, alluded to above, two deaths occurred. Of course, strict attention should be paid to the constitutional treatment as well. The local and general treatment should reinforce each other and proceed hand in hand. The nutrition should be watched and improved, and no case of diphtheria should ever be deprived of iron. To treat the local manifestations only would be illogical, and to employ constitutional measures alone would be to ignore a dangerous and insidious foe.

In regard to the method of making local applications, it will be conceded that all rude and forcible manipulation must be shunned. The brush, sponge, and cotton pledget, as ordinarily used, must be condemned. In intelligent hands it may be permissible to employ them, but even then with extreme caution, lest a solution of continuity in the tissues be produced which may become the site of autosepsis. The more gentle the application the more favorable is it to be considered; hence the spray atomizer is to be preferred in nearly all cases for the buccal and laryngeal varieties of the disease, and a suitable syringe carefully used for the nares and post-pharynx. — *Arch of Pediatrics.*

EPIDEMIC BRONCHITIS.

BY J. C. MOORE, M. D., TRENTON, TENN.

Bronchitis is an inflammation of the bronchial tubes. It varies in gravity and duration according to the size of the tubes affected, may become epidemic, and is then commonly known as influenza. As this is the form we wish to treat, we will dwell at length on the epithet epidemic.

There are two great vital forces: One represents the formative and the other the destructive action. Upon the equilibrium of these depends uniform health. For a disease to become epidemic, there must be two sets of causes to act on the vital forces. One set is extrinsic the other intrinsic.

First we notice as extrinsic that a low, changeable temperature diminishes oxidation of tissue, overcomes physiological resistance and lowers vitality. It is evident that inflammation is concomitant with lowered vitality. This is proven by the fact that it will follow, if the physiological resistance has been lowered by section of certain nerves causing a loss of tone in the vascular system.

Breathing an atmosphere impregnated with decomposed animal and vegetable matter is another extrinsic cause. One of the most frequent sources of this poison is rebreathing the atmosphere of an ill-ventilated room.

As an intrinsic cause, we have zymotic action which, is constantly going on in the human system from the disintegrative action of tissue being intensified when the excretory organs (which act as so many sewers) fail to eliminate this decaying matter from the system. That such is decaying matter, is proven by the fact that the breath occasionally has a fetid odor. When this does not proceed from carious teeth, ulcerations in the air passages, disease of the lungs, or other similar cases, it must result from the excretion of odorous matter

in combination with watery vapor, from the pulmonary surface. We know that fatal results sometimes occur from entering sewers impregnated with sulphuretted hydrogen and hydrosulphuret of ammonia, given off from their decaying contents.

We may likewise expect that when the emunctories of the human system fail to carry off the fermenting matter it will have a deleterious effect on the blood.

To recapitulate: We have the vitality of the system lowered from extremes of temperature and the blood impregnated with dead animal and vegetable material in which zymotic action is going on. With this combination of causes we have a nidus, or, a prolific soil for the germination and multiplication of any specific vital organic microbe.

Flint says that a specific cause is involved in the production of this as of every other epidemic disease. Bartholow says that this specific cause is a minute organism. Conceding this to be a fact which we see is in accord with the best medical literature of the day, and thoroughly investigated as evidenced by the microscopical researches of Pasteur, Tyndall, Virchow and others, we see how this living germ, being carried into the blood which is poisoned with zymotic material, by its catalytic action rapidly converts this decaying matter into its own specific germs, until the blood is thoroughly saturated, and its specific disease produced. Not only is epidemic bronchitis accounted for in this way, but to my mind erysipelas, infectious pneumonia, puerperal fever and many other diseases, through the influence of these poisons in which is implanted a specific germ, are developed.

Epidemic bronchitis occurs in all climates and latitudes, affects persons

of all ages; it is sometimes very rapidly diffused. It differs from ordinary acute bronchitis; sometimes there are prodromes, but usually the disease is ushered in with a chill followed by fever. The fever is remittent, the exacerbation occurring at night.

Catarrhal symptoms come on with intense headache. At first there is intense sneezing. The respiratory mucous surfaces become dry and irritated, a hard, dry, troublesome cough comes on and, after a time an abundant acrid mucous secretion. Then after a few days an abundant purulent expectoration occurs; more or less dyspnoea is experienced. There are some sibilant and sonorous rales. The nervous system is disturbed out of proportion to the gravity of the local disease, the local bronchial affection being symptomatic of a specific constitutional blood poison, and thus it runs a specific course (as do all zymotic diseases) and terminates in from four to eight days. The temperature usually reaches the maximum on the fourth day. The disease terminates by crisis or by lysis.

Relapses sometimes occur. Capillary bronchitis and pneumonia may occur, showing a virulence of the poison.

The disease is rarely fatal unless through complications. Chronic ex-

isting diseases are apt to be aggravated by an influenza. Pregnant women attacked are apt to abort.—*Bartholow*, An epizootic which prevails among horses in this country is analogous in many respects to epidemic bronchitis in the human.

A full dose of quinine and morphine at the beginning will very often abort the malady. Quinine is useful throughout the disease, as it destroys the germs. Pilocarpine or antifebrin given on the first day will often abort the disease by the eliminating power. They are also useful during any stage for headache or dyspnoea. A mild laxative may be given. Moderate dia-phoresis is useful throughout the disease. In cases of much severity the following is useful:

R. Tinc. rad. aconit.,	16 drops.
Sp'ts ether. nitr.,	4 dr.
Tinct. ipecac,	8 drops.
Syr. bal. tolu.,	ad. 4 ozs.
Dose, one teaspoonful every three or four hours.	

Aged, feeble subjects and children require stimulants, ammonia and digitalis. Local treatment is important. A large emollient poultice should be applied over the chest with sufficient mustard to produce constant irritation. Tonics are often required during convalescence.—*Memphis Med. Monthly*.

A PLEA FOR A MORE AMICABLE RELATIONSHIP AND GREATER SOCIABILITY BETWEEN PHYSICIANS.

BY T. B. GREENLEY, M. D., WEST POINT, KY.

The question is frequently asked by the laity, why it is that doctors get along so badly with each other?

This question grows out of the fact that physicians, in little towns more particularly, are often at loggerheads, ignoring all social intercourse, and occasionally become belligerent. Such a state of affairs between physicians in a neighborhood is to be greatly lamented, and proves to be a great disadvantage,

not only to themselves but to the people, as it is not uncommon for the latter to take sides with their favorite physician even to sharing with him his acrimonious feelings. Owing to such an unpleasant feud, when sickness occurs and consultation is wanted, the partisans of one doctor will not have the other even if he would agree to consult, which he generally refuses to do; hence, a consulting physician must be

had from a distance, both to the cost of the sick man as well as the discredit of the local physicians.

This kind of trouble between physicians hardly ever results from want of professional knowledge on either side, but from other causes, and is usually of a trivial character. Sometimes it may have its origin in what some tattler or gossip lover may have heard as coming from one physician speaking slightly of another, and perhaps without any foundation, or, if any, magnified. The writer has had experience in this particular on more than one occasion. Quite recently he was called to see a lady in the process of abortion who had been under the care of a physician at some distance. On her return home it got to the ears of the doctor that I should have said he had been guilty of malpractice in her case, upon which he wrote me a very insulting note. Of course nothing had been said by me derogatory to his medical standing. Now as this man had known me from his student-days, and knew that I had always treated him courteously, and, I might say, assisted him in word and deed, it would have been a small matter for him to have written me and inquired in a friendly manner whether I had said so and so respecting him. In another instance, also of recent occurrence, I was called to see a child in the absence of the attending physician. I prescribed and left a note for the doctor, as I always do in such cases. Not long after I heard that the mother of the child had told the neighbors that I had said the child had not been treated correctly, and that young doctors knew nothing about treating children.

The next time I met the young doctor, instead of a quarrel or a fight, we had a big laugh over the matter. He had also known me from boyhood, and had more sense than to believe I had made any such remark.

Physicians are, perhaps, the most sensitive class of men in the world, and brook slighting remarks with little patience; this more particularly in regard to their professional acquirements, as it is natural for every doctor to think he is well qualified. More especially is this so with the young doctor just graduated. It should be a rule with every physician to speak well of his brother doctor, if he speaks of him at all; and if he can not conscientiously speak in his favor, he should not speak against him, for the least insinuation to his detriment is apt to reach him greatly magnified. Professional jealousy in many instances, serves as a groundwork for unpleasant feelings between medical men. Should a neighbor doctor get more calls than we do, it is no good reason for unkind feelings on our part, especially if he does not obtain his practice by trickery or detraction of us. If he observes the ethical code and is a gentleman, we are bound, as honorable members of the profession, to treat him with gentlemanly courtesy.

We must recollect that it is not possible that all members of the profession should succeed at once in obtaining a lucrative practice; and if it should fall to our lot to fail in this particular, we should not cast any blame on any one else, but charge it to fate and wait with patience for our time to come. But in the mean time we should not expect it to come to us unless we are prepared for it, and I can assure the young members they will not be prepared for it if they spend their time idly at the street corners, postoffice, or depot, gossiping with loungers. The proper place for a physician, when not engaged in professional duties, is in his office among his books and journals. It is here he can prepare himself to meet the calls of the sick and to acquit himself with credit as a physician.

There are very few men in the profession who will not finally succeed in

their calling if they pursue the proper course in every particular. Of course, it is understood that when speaking of physicians we mean regular members of the fraternity, and we also mean *gentlemen*, for I think, above all professions, divinity not excepted, physicians should be gentlemen. As before remarked, all should not expect to succeed at once, but those who do not must bide their time with patience.

We should remember the remark of Daniel Webster, when a young man asked his advice relative to his studying law. He said, "There is plenty of room at the top, but the bottom is crowded." This very properly illustrates the condition of our profession—there is plenty of room in the upper stories, but the bottom is crowded. But, while many of us are at the bottom and endeavoring to ascend, we should not envy those above us if they have arrived at their eminence by true merit and not by intrigue; but, on the contrary, we should award them due credit for their attainments, and strive to emulate theirs virtues and industry. And those who have been so fortunate as to have mounted high up the ladder should look down kindly on those at the foot, who, with meritorious endeavors, are trying to ascend, and by encouraging words assist them up. I think every deserving young physician should be kindly taken by the hand and encouraged by the older members of the profession. But, unfortunately, the contrary is too often practiced. The young man is frequently not only ignored, but regarded by the old doctor and spoken of as a quack or ignoramus, when at the same time, perhaps, he may be far superior in scientific attainments to his elder *confrere*.

When we regard the matter of kindness that should be extended to the young doctors by the elder members of the profession in its proper light, humanity and patriotism both compel us to the performance of that duty. If

we reflect for a moment we are impressed with the fact that those who are at the bottom, and earnestly and honorably striving to ascend, must sooner or later take our places. Therefore it becomes us to do all in our power to induce them to qualify themselves in the best manner possible for the successful management of disease, while it is patriotic to wish our successors ability to maintain the dignity, honor, and renown which the Commonwealth already enjoys in medical science.

The profession of medicine, when acquired by honorable men, should be a tie to bind them together in a friendly, social manner, as the sign that cemented the friendship of Jonathan and David. Our profession, in a word, should make brothers of us, no difference whether we stand high up on the ladder or at the bottom; whether we are old in the profession or newly-fledged graduates. It is gratifying to look back a quarter of a century and contemplate the position occupied by the medical profession during the unhappy civil war. But very few on either side became active partisans, and friendly intercourse, as a rule, was maintained between the members of the profession of the two sections. I have thought that to some extent peace was effected a little sooner by the friendly relations maintained by the members of the medical profession and those of the Masonic fraternity of the North and South.

In conclusion, I would like to say a word respecting a few of the great men of the profession of our State—those who by force of talents and merit ascended the ladder of fame and arrived at the topmost round. It is quite common to eulogize the great dead, and even to erect monuments to their memory, which is a very laudable practice, and one it is to be hoped will be continued for all time. It can not be denied that the fame acquired by the

members of the profession of Kentucky is equal to, if not greater, than that of any other State. In order to illustrate this fact we have only to refer to our McDowell, our Brashear, and our Dudley—the first to originate an operation that has given thousands of years of life to suffering women; the second also the originator of a capital operation, requiring great genius and dexterity, and which is now practiced the world over for the benefit of the afflicted, and the third, the most expert and successful lithotomist of his time. Were we not to hold the memory of these men with pride, gratitud and respect, we should be recreant to the proper instincts of our profession, as well as destitute of that patriotism which every Kentuckian should possess.

But we can call to mind other great men of our State who hold in no small measure our veneration and respect. Who among us can ever have blotted from his memory the names of Gross, of Yandell, of Drake, of Caldwell, and many other great lights of medicine who wrote their names high on the scroll of fame, doing credit to themselves and honor to their state. It

causes the professional heart to thrill with patriotic pride when the names of our great men are called to mind, and we are always ready to award the due meed of praise to their memories.

I have often thought that it might be well to change, to some extent, our mode of awarding praise to the great men of our profession. Let us not confine ourselves to bestowing posthumous praises and honors, but award them, in part at least, *ante mortem*. To some extent this was done in the case of our revered and illustrious Gross. He was termed the Nestor of Surgery in America, besides having other honors conferred on him both in this country and in Europe. And no man ever wore his honors with more dignity and circumspection.

Nothing could be more gratifying or pleasing to one's senses than to have his merits recognized and appreciated by his fellow-workers in medicine, and I think it would be a happy thing to manifest some of our respect and appreciation for the great men of our profession while living, and not wait to commemorate their virtues after their work is ended.—*Amc. Prac. and News.*

FRACTURED PATELLA TREATED BY WIRING.

BY J. J. BUCHANAN, M. D., PITTSBURG, PA.

The patient is a German laborer; his fracture was the result of direct violence, caused by the stroke of a three hundred pound box which fell against his knee. He stated that the accident happened in the middle of the day of June 30th. He continued to do his laboring work till evening, but on the following day found he was unable to stand on the limb. I suppose that the blow broke the bone, but the capsule held together till evening.

When he was brought to the hospital, five days afterward, the joint was con-

siderably distended and the fracture easily recognized, but the lower fragment seemed to be very small. He was informed of the probable result by the use of external appliances, and the advantages as well as the risks attending the method by suture. With a full understanding of the circumstances he demanded the treatment which would give him the most useful limb, even though at some risk to his life. I accordingly operated on the eleventh day after the injury.

The most scrupulous precautions

against sepsis were taken. Instruments and appliances were put through the same course of preparation as for laparotomy. Continuous irrigation with $\frac{1}{100}$ sublimate solution was employed, and the transverse incision was made to the full extent of the rent in the capsule. The lower fragment was not larger than a chestnut. The capsule was much lacerated, and a number of narrow shreds hung into the joint; the joint contained a great deal of clotted blood and bloody fluid. The joint was thoroughly washed out, and all loose pieces and ragged ends and edges of capsule were cut away with the scissors. The fractured surfaces were refreshed by the vigorous use of a curette.

A single hole was drilled through each fragment, the drill entering about three-eights of an inch from the line of fracture, and emerging at the cartilaginous border of the fractured surface. As a motive power for the drill I used the dental engine, which was kindly supplied and manipulated for me by Dr. Charles Phillips, a dentist of this city.

A silver wire of 24 gauge was passed. An incision was made into the lower part of the joint on the outside of the limb and a rubber drain inserted, the inner extremity barely entering the joint. The silver wire was then twisted firmly, and the ends of the wire were turned down between the edges of the opposed fragments. The capsule was closely united over the whole length of the rupture with the continuous catgut suture.

Interrupted silkworm gut stitches were used for the soft parts down to the capsule. Sublimated dressings and a posterior splint completed the work. At the expiration of the third day the drain was exposed and withdrawn. The primary dressing was removed at the end of a week, when the wound of the soft parts was found to be soundly healed and the skin stitches were all taken out. The progress of the case

was aseptic and of course absolutely devoid of pain and discomfort.

At the end of four weeks the patient was allowed out of bed, and at the end of five and a half weeks all dressings were removed and he was allowed to walk upon the limb with the aid of crutches. At the end of six and a half weeks he was permitted to rely on a cane without any support to the limb. When I last examined him, four of five days ago, palpation of the patella gave no evidence of its ever having been fractured. The range of motion is not yet great, but is rapidly increasing, and will, doubt not, be completely restored.

There is no question that the treatment of fractured patella by external retentative apparatus is extremely unsatisfactory. An occasional case of close ligamentous union encourages the surgeon, but the great majority of cases have a half inch or more of separation, which gradually increases; a large proportion have refracture or rupture of the ligament; and almost all have limbs of greatly impaired usefulness.

This operation, when it succeeds, as it usually does, is said to leave the patient with bony union and with a freely movable joint. It certainly is the most speedy and least troublesome of all methods of treatment. I myself think it is destined to be the treatment of the future. As our method of securing asepsis of operative wounds become more certain and our skill in applying them increases, so will the patella suture become better established. In the present condition of science the mortality of the operation is slight, but it still exists. I think it will be reduced practically to zero. As things now are, I think the advisability of the operation in any particular case should depend upon the wishes of the patient and the skill of the operator in securing asepsis.

If the patient is unwilling or his attendant lacks the technical skill for

rigid antisepsis, the operation should not be thought of. On these points I can do no better than to quote the works of Frank W. Rockwell, of Brooklyn: "Finally, I believe that so long as this form of fracture is treated by the ordinary methods employed, just so long will the present unsatisfactory results continue to obtain, and I believe it to be the duty of the surgeon, in any given case, to at least give his patient the benefit of deciding for himself whether he will have wiring done or not; and, in event of his selecting the operation, to do it at the earliest proper time, if capable of performing a thoroughly aseptic operation, since I believe that by so doing he will obtain the best results in the largest number of cases."

To the same effect has Dr. Louis S. Pilcher, also of Brooklyn, expressed

himself: "The whole principle of exposing the patella and refreshing the fragments and bringing them together is the outgrowth of the antiseptic principle, and to a very considerable extent it may be considered one of the most difficult achievements of antiseptic work. Now it seems to me that, in expressing an opinion upon the justifiability of an operation of this kind, we ought to qualify it somewhat in this way: That a surgeon who has become a master of the practice of antisepsis, as well as the principles, and who is able to control with certainty the conditions which surround his patient, would be justified in opening the knee joint in a recent case of fracture of the patella and bringing the fragments together; but I doubt very much whether, excepting under such circumstances, it would be justifiable.—*Pittsburg Med. Review.*

FRACTURES OF THE FEMUR.

A Clinical Lecture.

BY HAL. C. WYMAN, M. D., DETROIT, MICH.

Fractures of the femur have been the cause of more controversy among surgeons than any other fractures. There have long been differences of opinion as to the degree of shortening which must necessarily follow a fracture of this bone, some acknowledged surgical authorities declaring that there must always be a shortening after a fracture of the shaft of the femur, while others declare that if the fractured bones are properly adjusted and treated, there need be no shortening whatever. Perhaps both are right. It may be that the character of the fracture has a great deal to do with the result.

I have two cases to show you this morning. The first case, that of a young man twenty-three years of age, who was thrown from a wagon, falling in such a way that two of the wheels

passed over his right thigh, producing compound, comminuted fracture of the thigh bone. By the term compound fracture I mean a fracture in which the soft parts are divided, as well as the bone; and by the term "comminuted," as applied to fractures, I mean a case where the bone is broken into many fragments. It is not fair to presume that a case in which five inches of the shaft of the femur about its middle, has been ground into fragments beneath the wheels of a wagon running over a hard pavement, would unite without any deformity to the bone. In other words, it is not fair to presume that nature would repair such an extensive injury to the tissues without producing some distortion.

Now, this case was dressed first in the long splint of Liston—sometimes

called that of Dessault. This long splint is applied thus: We first put upon the leg an adhesive plaster, in the form of a loop extending under the instep in the form of a stirrup, while a strip extends up on either side of the leg, about a foot. It is held in position by a firm roller bandage. To the loop, or stirrup, portion of the strap, we fasten a piece of one-half inch rubber tubing, which is made taut and tied through the notches in the end of the long splint, which projects about a foot beyond the foot of the patient. The upper end of the splint is secured in position by a perineal band, which is carefully padded to prevent its excoriating the perineum, against which it exerts counter pressure. Then through the long splint, fixed in this way, the rubber cord being made taut, extension of any desired degree is maintained. Then a roller bandage is carried loosely around the limb and over the long splint. I forgot to state that before applying the long splint, we first applied what are called coaptation splints, of heavy pastboard, about fifteen inches long and two inches wide, around the thigh. A series of these, four in number, two on the outer and two on the inner and lower portion of the thigh, were applied over the seat of fracture and were secured by a roller bandage. Previous to this, however, the loose fragments of bone which were likely to spread through the tissues in process of repair, were carefully picked out and removed from the wound with a forceps. Then a drainage tube was inserted so that all fluids that might accumulate in the wound could be thoroughly drained away. The injured member was then enveloped in dried cotton and the coaptation splints and secured with a roller bandage as before mentioned. Plasters were then applied to the leg, and the long splint with the rubber cord and perineal band for extension and counter extension. Care was taken to arrange the dressings

in such a way that access is easily had to the wound in the thigh, so that it may be cleaned and kept in a healthy condition. It was intended to make this a permanent dressing. By and by, after a few days, as the inflammatory action subsides, and the reparative processes become more thoroughly established, we will remove these long splints and this perineal band, on account of the inconvenience which it constantly occasions this particular patient. I want to be particular to say that a splint or a system of dressing which is adapted to one fracture may not by any means be adapted to all fractures. This man does not tolerate long splints well; he is restless — nervous under the constant pulling of the elastic cord and the continual pressure of the perineal band. Another man, of different organization, different temperament, might fare differently under the same treatment, and for such a man this might be the best treatment that could be carried out, but in the present case we will change this dressing for the reasons just mentioned, and put the limb in a plaster of Paris bandage, taking pains to have the limb fully extended at the time the bandage is applied, and carrying the plaster well up on to the perineum, having the pressure of cotton so finely adjusted that it will maintain the desired degree of extension throughout the process of cure. We will also, when we come to apply the plaster, make a fenestrum or window through the plaster over the wound in the thigh, through which the dressings may be changed.

At first glance the inexperienced observer might think that the plaster of Paris dressing would not maintain a sufficient degree of extension to prevent shortening while the bone in this case unites. In reply to that idea, I want to say that I do not believe any degree of extension which could be applied to the limb would prevent a certain amount of shortening while new bone

was thrown out to fill in the gap caused by the removal of the minute fragments. It is a fact that when bones are carefully divided in experimentation, and are pulled apart so that a considerable interval exists between them, and the muscles which envelop them carefully divided, so that there is no contractile force, the bony formation which is thrown out to repair the injured bone will not reach sufficiently far beyond the point of fracture to extend or increase of the broken bone. When broken bones unite the tendency is for them to become shorter than before they were broken, and when a bone has been so badly crushed that five inches of its extent is completely broken up, it is only reasonable to expect that a very considerable degree of shortening will be the consequence of the union of the divided bones.

I have already alluded to the use of plaster of Paris dressing, and I want to say simply this: That much art can be acquired in the use of plaster, if the cotton is evenly applied, and cotton should always be applied next to the skin, and a roller bandage should be rolled singly and evenly over that. The plaster may be adjusted with such deftness and firmness and uniformity of pressure that it will be capable of restraining all muscular action. If you think for a moment of the circumstances which occur in muscular contraction, you will realize that with the shortening of a muscle incident to its contraction, it increases its transverse diameter. For example, a muscle like the biceps or quadriceps extensor of the thigh will measure considerably more in its transverse diameter while in a state of contraction than it does in a state of relaxation; and if a plaster of Paris bandage be properly applied the pressure which will be exerted by it will be so even and uniform that it will produce an increased thickness of the quadriceps extensor and a consequent shortening of the muscle; and without

shortening of the muscle there can be no movements of the fractured bones. We have then in plaster one of the most important aids in preventing that shortening of broken bones which results from muscular contraction. A great many surgeons apply the plaster of Paris primarily. They will dress all compound fractures with it.

They apply the plaster over all and await the development of symptoms—rise of temperature, quick pulse, pain—to indicate the presence of pus, and then make a fenestrum or hole through the plaster of Paris bandage, by means of which the discharge may escape. But occasionally symptoms indicative of the presence of fluids or the formation of pus are unreliable. The presence of pus is not always indicated by pain, or a rise of temperature; and instances are on record where effusion has painlessly occurred in a limb wrapped in the firm unyielding plaster of Paris dressing; and with this effusion there has come an obstruction of the circulation which has resulted in gangrene. I have seen a little finger the seat of dry gangrene as the result of a simple plaster of Paris bandage put on for the purpose of holding in position the bones of the first and second phalanx after they had been reduced because of dislocation. The firm, uniform pressure of the bandage prevents that access of fluids to the parts which is necessary for the repair of the damage. In my judgment, it is better to defer the application of the unyielding dressing until the first swelling has disappeared; until nature has made her first effort to repair the injury. After that, no better dressing can be applied.

CASE 2.—This little boy, 13 years of age, while playing about a barn was struck by the heavy door, which a gust of wind blew from its hinges, producing an oblique fracture of the lower third of the thigh. This fracture, you see is now dressed with plaster of Paris. The boy, as you will notice,

has unusually fine muscular development. The injured limb, as you will also notice, is distorted by a deformity of the lower third of the tibia and fibula. You will notice that the bones of the leg are bent forward. Inquiry reveals the fact that this leg was fractured three years ago, and that subsequent to the union of the fracture the bones began to bend under the weight of the body. As the boy improved in health he used the limb, and it inclined forward in the manner that you see, giving rise to a very serious deformity, a permanent shortening of the limb of a little more than two inches.

At the time the present injury was received a careful examination was made of both the sound and injured femurs, and we judged that there was no congenital defect in either of them. Now, as you look at the plaster dressing, this bulging indicates the lower border of the patella. By comparing it with the patella of the sound limb, we easily decide that there is at present no shortening of the femur; but owing to the fact that the fracture was oblique, and the line where union must take place widely extended, it would not be strange if the same process of softening should take place in the new tissue thrown out to weld together the broken fragments as took place under similar conditions when the leg was first fractured; and to guard against that we shall keep this limb carefully enveloped in plaster and keep the boy off the limb for several months. We are led to this step because we believe that there is some peculiarity in the boy's disposition or nature which impairs the usual process by which bones are united. No better evidence of the existence of such a peculiarity of organization could be asked for than the deformity which we find in the leg; and when we recall the fact that at the time when the fracture was produced, and subsequently, the most careful

surgical appliances, as far as splints and dressings are concerned, and rest in bed were imposed, yet, after the physician had supposed that the bones were firmly united, and the eight weeks' time which commonly elapses before persons with fractures are allowed to use the injured limbs had elapsed, and the patient has begun to walk upon it, then the softening seemed to take place and the bone began to bend forward, producing the deformity which you see. In this case, too, a long splint was used for several days, not for the same reasons that it was used in the other case, but for fear that the unusual muscular development which you see that this patient enjoys might become excited and disturb the rest of the broken fragments after they had been carefully adjusted. However, as soon as a few days had elapsed and we found that the boy had good control of his muscular system and that there was very little twitching or jerking of the muscles of the thigh, we took off the firm splint and applied the plaster which you see.

These two bases serve well to illustrate the fact that fractures seldom heal and make the limb as good as it was in the first place. They show, too, that change may take place in a bone which has been broken long after it is supposed to be sound and unyielding. These changes may be so little in character that ordinary surgical skill will not detect them, and when they occur the surgeon should not be held responsible. A green stick fracture of the leg is sometimes mistaken for no fracture and the patient sometimes gets a deformity in consequence of walking on the broken leg too soon, but in the case of the boy I have just shown you, the history shows that he had a simple transverse fracture, and that the deformity was due to conditions which developed after the repair was supposed to be complete.

CONCLUSIONS.

1. Fractures of femur may heal without shortening, but are not likely to.
2. Always turn the toe a little in when dressing a broken femur, because of the great tendency to eversion of the toe after fractures of the thigh.
3. Don't forget when using plaster

apparatus that the even pressure causes wasting of the limb, a shrinkage which permits movement of the broken bones inside the plaster cast.

4. Guard against shrinkage by removing the cast or cutting it open lengthwise, filling with cotton and tying it tighter.—*Med. Age.*

SHOCK.

BY D. W. CHEEVER, M. D., BOSTON, MASS.

The operative surgery of our time has annulled pain temporarily, arrested hemorrhage permanently, averted septic absorption. It has not prevented shock. This is still a cause of much fatality. It is the object of this paper to inquire whether modern surgical procedure has diminished shock; wherein it fails to do so; and to suggest improvements of its defects.

What is shock?

When any one gropes his way in a dimly lighted passage, and meets unexpectedly a strange person at some turning, he experiences a start, a mental apprehension, his heart turns over, flutters, but at once recovers its balance. Pursuing his path, if he now, in descending, misses a step in the dark he has a greater shock to his nerves, he braces himself, flutters, sweats, or is chilled. If he falls and bruises himself moderately, he has vertigo, nausea, cold sweat, pain. If he falls and breaks open a joint, he has syncope, epileptiform convulsions, nausea, fluttering pulse, sweat, pain. If he injures himself more severely, he has unconsciousness.

This is a simple description of the degrees of shock: Apprehension, fluttering, sweating, chilliness, pain, vertigo, nausea, faintness, convulsions, unconsciousness, and collapse.

The phenomena of a fainting-fit are the phenomena of shock. Sudden, disagreeable, painful, destructive impressions produced on the surface or effer-

ent nerves, and affecting the brain; thence the ganglionic system; then the heart, the stomach, the skin; and thus the brain at last.

Moderate shock terminates in reaction. This is the *recoil* of the system. It restores the balance; but the pendulum which marks the nervous force swings back beyond the normal line. We have temporary fever, flush, full pulse, excitement.

Severe shock is more lasting. The pulse vibrates, intermits, flags, rallies, flags again, is soft, compressible, uncertain; faintness is constant, but partial; dilatable pupils; pallor; imperfect reaction; very slow recovery; a condition where a feather turns the scale against the patient.

If now an operation is done, we have renewed shock, prolonged shock, secondary shock; a matter of days rather than hours; persistent nausea; exhaustion; a lowered temperature; diarrhea; imperceptible and gentle death. Or, if an old person, that state known as prostration with excitement; typhoidal delirium, a dusky flush over the malar bones, dull eyes, intermittent pulse, jactitation, exhaustion, death.

Primary shock, reaction; early and perfect; or slow and imperfect. Secondary shock; prostration, nausea, excitement, collapse. Loss of blood from accident or operation, adds to the shock or complicates its symptoms.

Jar, crushing, mutilation, pain, cutting, bleeding, chilling, all act on the

nervous centre; react on the ganglia, the heart, the power of breathing, the temperature, the consciousness, the life.

Given then the problem and the phenomena of shock, what particular influences have the operative procedures of *modern surgery* upon them?

They may be summed up in three points:

The effects of anesthetics;

The effects of the operations;

The effects of the dressings.

These all belong together and affect each other.

Anesthetics annul pain, but end in nausea.

Operations under anesthetics are needlessly prolonged and exhausting.

Modern dressings are tedious and chilling.

Have we lessened, or added, to shock by modern surgery?

Pain and bleeding are *less*. Slow cutting, nausea, exposure, low temperature are *more*. Primary shock is diminished; secondary shock is increased.

Formerly the time consumed in an operation was short. An amputation was hurried, now it is deliberate; an abscess was incised, now it is aspirated and curetted; a joint injury was cut off, now it is excised; the peritoneum was peeped into, now it is boldly explored; the bladder was cut for stone, now it is a prolonged crushing and washing; a breast was amputated, now the axilla is formally dissected. The old method was a matter of minutes; now it is one of hours.

Patients are frequently from one and a half to two hours on the operating table; and three hours in recovering consciousness so that they can swallow. Do we realize what this prolonged cutting, pinching and dissecting mean to the nervous system after anesthesia is past? Does not the long exposure of the great veins to the air, in dissecting tumors, increase coagulability and future infarction? Can the peripheral nerves be lacerated *seriatim* without

exhausting their constitutional irritability? It is recognized that long-continued and large dissections on the front and sides of the neck are especially fatal.

Operations of *secondary* magnitude are now so prolonged that I have repeatedly seen patients die of primary shock, or *repeated shocks*, where the patient was one to two hours under the knife. It is said that he had not the vitality to resist. He had not; but consider what a perineal section, scooping out a uterine tumor, curetting a bladder, removing glandular enlargements, sometimes involve in time, in exhaustion, in capillary oozing, in shock.

Equally unphilosophical and fatal is the practice of operating in cases of primary shock before reaction has come on. An amputation is begun in half-life, and ended in death. Especially difficult to decide are the cases where the patient reacts imperfectly and relapses. These cases are easily made fatal, and only saved by quick amputation, slight exposure and short anesthesia. The golden moment of fairly established reaction must be seized, before traumatic fever sets in. This moment comes in from six to eighteen hours after the injury, or it never comes.

It should be considered an *axiom* that anesthesia does not diminish existing shock, but only annuls the additional shock which the pain of cutting produces. It prevents the pain of an operation from increasing the shock which may be present from an injury. It prevents the pathological case from experiencing the shock produced by the pain of cutting out a tumor; it does *not* prevent the secondary shock of the mutilation; it adds to secondary shock if the anesthesia is prolonged.

In feeble subjects, the lack of nourishment which precedes an operation, desirable on account of safe anesthesia, is much aggravated by their inability to retain food after the operation. This has an important influence in bringing about collapse.

Lowering of the bodily temperature is constant after an operation under anesthesia. The thermometer frequently falls to 97°, to 96°, and after severe and prolonged operations, to 95° F. This is a very serious matter, and has a marked influence in delaying reaction from shock. This chilling of the vital heat is induced, first, by anesthesia, which, if prolonged, ends in a dripping sweat; next, by careless exposure during an operation. Then, also, it is largely due to antiseptic irrigations, to vapor *douches* of similar agents, to applications of cloths wet in corrosive or carbolic solutions around the site of the operation. The axillæ, the neck, the thorax, and the abdomen are especially prone to deleterious chilling in this way.

Evaporation is a great factor in reducing heat; and this is constantly occurring on the body of the patient, in a warm atmosphere, during a prolonged operation. Especially is this dangerous when the peritoneal surfaces are exposed; evaporation then is very rapid and very extensive.

Warm *douches* and washes give as great a subsequent chilling as cold ones, as all experience who take a tepid bath.

The sufferer is frequently allowed to lie about too long, under an anesthetic, waiting for his turn, in busy hospital practice.

The surgical toilet of wounds, in the modern modes of dressing, is depressing, exhausting, devitalizing.

Finally, comes the greatest evil of all, nausea. Nausea is one of the marked symptoms of severe shock, primary or secondary. Unfortunately, anesthetics very frequently produce this as a secondary effect.

Persistent vomiting and retching mark the slow sinking and collapse of secondary shock after capital operations. Continued nausea is one of the worst of symptoms; begun in pain and shock, it recurs after anesthesia, and

continues as the most dangerous factor in preventing reaction.

What can we do to prevent or diminish shock?

1. Wait for reaction.

2. Never neglect to calm those suffering mental shock by a cheerful word and personal presence.

3. Give alcohol, either spirits or wine, a quarter of an hour before the anesthetic.

4. Make the anesthesia short; never begin it until everything is ready; suspend it during the less painful dressings. Consciousness returns *tardily*. We keep up the anesthetic longer than is necessary.

5. As rapid an operation as can prudently be done.

6. As short a dressing as is practicable.

7. As a cardinal point, avoid *chilling* the patient.

To promote reaction after the operation:

1. Persistent and *carefully applied dry heat*. (Be *overcareful* about accidental burns.)

2. Liquid nourishment, combined with a stimulant and a little laudanum, by enema.

3. Subcutaneous injection of brandy.

4. Aromatic spirits of ammonia by the mouth. Champagne is sometimes retained when other things are rejected.

5. Black coffee and brandy, the stimulant *par excellence*, when it can be retained on the stomach.

6. Quiet; a horizontal, or more than horizontal, position; sleep; assurance that all is over and doing well.

Modern surgery has won *three* great triumphs:

It substitutes sleep for pain.

It averts secondary hemorrhage by the animal ligature.

It prevents fermentation by germicidal applications.

Can we add a *fourth*, by stilling the nervous system and averting or diminishing secondary shock?—*Boston Med. and Surg. Journal*.

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EDITORIAL.

EXAMINATIONS BY STATE BOARDS.

From time to time we have received copies of the questions propounded by various State Boards of Health to those seeking license to practice. In looking over these lists we have often been struck by the difficult character of many of the questions, and by their unpractical character. Some of them are merely catch questions, and should not be asked in any examination whose purpose it is to test the real qualifications of the candidate to practice medicine and surgery. We doubt greatly whether one in five of regularly graduated practitioners of ten years' standing could gain an average of even fifty per cent in many of these examinations. In but few of them are questions to be found which will give any reasonable insight into the real practical attainments of the candidate. This is also true of many examination papers required by pharmaceutical boards.

The question arises as to the real intent of making the questions so difficult. If it is to limit the number of successful licentiates, without regard to the general qualifications of the candidate, then it can be safely assumed that this course will ultimately work against the purposes for which the boards were founded, and create a general feeling on the part of the public against them, and thus greatly impair their usefulness, or even cause the withdrawal of legislative favor.

Such examinations are made in too great haste. Two or three days are not sufficient for the examiner, if conscientious, to satisfy himself as to the real capabilities of the persons appearing before him. The Prussian State examination (staats examen) should be taken as a guide, and followed as nearly as possible, with such modifications only as the charters of the boards will permit.

THE MILITARY TRACT MEDICAL SOCIETY.

The fall meeting of this flourishing society was held in Bushnell Tuesday

and Wednesday, Oct. 23 and 24. A very creditable number were in attend-

ance, and the character of the papers read and the discussions were above the average. The citizens of Bushnell gave the visiting doctors a handsome reception and banquet on Tuesday

evening. Much credit is due Dr. Harrison, the efficient and bustling secretary, for the success of the meeting. Many of the papers read will be printed in succeeding issues of this journal.

DR. MACKENZIE'S REPLY.

The appearance of Morrell Mackenzie's book on the case of the late Emperor of Germany has aroused a wonderful furor, both in England and Germany. In it he criticises his German colleagues most severely, and accuses some of them of hastening the Emperor's death. As a physician we believe his conduct was not above criticism. We suspect that he was aware that the disease was cancer, but for

political reasons withheld his real opinion and prevented his colleagues from establishing the fact of its malignancy. By doing so he caused the elevation of the English Victoria to the dignity and wealth of Empress, and thus made sufficient provision for her widowhood and her younger children. As a diplomat Sir Morrell is a grand success, but as an honest physician his methods are not above suspicion.

PERISCOPE.

THE MANAGEMENT OF THE STAGE OF CONVALESCENCE OF TYPHOID FEVER.—Dr. James H. Hutchinson, of Philadelphia, noted the diverse opinions of authors as to rules for the management of this stage, some advising the administration of solid food so early as the second day after the cessation of the fever; others not until a week or ten days have passed. Dr. Hutchinson favors the continued use of the milk diet with a little milk-toast, and at the end of two weeks butcher's meat. The only objection to be urged against the milk diet are the wishes of the patient and the tendency it occasionally has to produce constipation. The administration of alcohol may be withheld in many instances; but, on the other hand, it may for the first time become necessary, and no doubt convalescence is often very much hastened by its use. Huxham's tincture he has found useful at

this time, together with iron, and pepsin and muriatic acid. Severe cases should remain in a recumbent position for a week after the beginning of convalescence. At first the patient may sit up for a half-hour, the time to be gradually increased. As soon as the patient's strength will permit, he should be removed to an adjacent room. Exercise in the open air is to be encouraged as soon as strength is regained. Convalescent typhoid patients are more emotional than in health, and severe relapses may occur from mental excitement. It has been noticed at the Pennsylvania Hospital that after visiting days there is more or less recurrence of fever.—*Med. Record—Practice.*

THE RELATION OF ALBUMINURIA TO LIFE INSURANCE.—Dr. Jas. Tyson, of Philadelphia, sketched the conditions

which should be constantly kept in view by examiners. These are—1. The applicant must in all other respects present the signs of good health. 2. The albuminuria must be unaccompanied by tube-casts, however perfect may be the health in other respects; albumin and tube-casts conjoined always meaning structural changes. 3. The specific gravity of the urine, that is, the "real" specific gravity (that of the quantity for the twenty-four hours), should not be lower than 1.015-1.025. Great care must be taken to secure the "real" specific gravity, as it would be unfair to reject the candidate on account of the specific gravity of a single specimen. 4. The signs of hypertrophy of the left ventricle, and the existence of high vascular tension associated with albumen would exclude the candidate. 5. The age of the candidate is a highly important consideration. It is doubtful whether any person forty years of age with functional albuminuria should be accepted, unless at least he has been long under the observation of a competent and conscientious examiner. 6. The presence of true gout in any case should decide against the person, because gout is always, sooner or later, followed by intestinal nephritis. Finally, retinal changes, such as are associated with nephritis, should exclude the applicant. In conclusion, the writer does not claim, of course, that we are in a position to put these conditions in operation, but believes, as we are enabled gradually to secure the desired education and training in medical examiners, the applications of these conditions will be possible. The absence of the albumin from the urine passed on rising in the morning is an important aid in the diagnosis of functional albuminuria, but not an essential one.—*Med. Record—Practice.*

MEDICAL RELATIONS OF ACUTE INTESTINAL OBSTRUCTIONS.—Dr. Reginald H. Fitz, of Boston, opened the

discussion of this subject by limiting his paper to the diagnosis and medical treatment of the acute internal, mechanical varieties of intestinal obstruction. The only causes recognized were strangulation from adhesions, vitelline remains, peritoneal slits, pockets and rings; intussusception, twists and knots, abnormal contents, strictures and tumors. Stoppage of the bowels was not regarded as the most essential symptom in diagnosis, since frequent loose stools characterize intussusception, and many occur in other varieties of obstruction. The diagnosis of acute obstruction is made by excluding the various causes of peritonitis. Its seat in the large or small intestine was to be determined by injections under high pressure when necessary. The variety was, for most practical purposes, an intussusception, or a twist of the large intestine and strangulation, or gall-stones in the small intestine. The differential diagnosis depended on the frequency of these varieties, the age of the patient, the antecedents and immediate symptoms.

The treatment consisted in the attempt to relieve intussusception of the large intestine by forced injection under anaesthesia, with massage, and to treat obstructing gall-stones by opium, possibly with the aid of laxatives and electricity. All the other varieties of acute obstruction require surgical treatment. The latter treatment is also necessary on or before the third day in cases of intussusception not yielding to forced injections, and in gall-stones when the symptoms become urgent.—*Med. Record—Practice.*

THE SURGICAL TREATMENT OF INTESTINAL OBSTRUCTION was taken up *seriatim* by Dr. Nicholas Senn, of Milwaukee.

Irrigation of the Stomach.—All forms of intestinal obstruction, no matter what the cause, are aggravated by anything that increases the hydrostatic

pressure on the proximal side of the obstruction. Irrigation of the stomach relieves this, and also diminishes the intra-abdominal pressure. This measure should always be performed before operation, as it prevents vomiting. An antiseptic solution should be used in the irrigation.

Distention of the intestine with fluids.—The mechanical effects of this measure are limited to the colon, the fluid does not pass beyond the ileo-cæcal valve. Why should we not in these cases resort to the lightest possible substance known, hydrogen gas, which is harmless, readily obtained, and aseptic?

Manual exploration by the rectum is a useful diagnostic and therapeutic measure where the obstruction is below the sigmoid flexure, provided the surgeon has a small hand.

Taxis and massage should be limited to cases where the obstruction is due to intramural causes, and a few cases of invagination. Uniform, uninterrupted, equable *pressure of the abdomen* is useful in preventing hyperdistention in these cases, especially when dynamic causes are feared.

Enterotomy, so frequently practiced in the past, he hoped had become very nearly obsolete. It should only be employed when it is clear that the patient will not be able to pass through the ordeal of laparotomy.

Lumbar colotomy—In cases where this operation was formerly employed we can often, by uniting the portion of the bowel above the obstruction with that below, by means of decalcified bone-plates, avoid the necessity for colotomy. I have specimens showing that a dilated congested bowel can be repaired when excluded from the fecal circulation in this way.

Dr. William Ord, of London, admitted that there was often a great deal of difficulty in the diagnosis. He was in favor of the views of Dr. Fitz, and claimed a little time before resorting to operation. In some of these cases, under the use of opium and time, the

cause of obstruction had disappeared. Where, however, there is mechanical obstruction the case must sooner or later go into the hands of the surgeon. This time should be a short one. The operation is a serious one, especially in people over fifty years of age. He had often seen the operation performed, and frequently fail in those cases where there was the most reason to expect success.

Professor Thomas Annandale, of Edinburgh, said that these cases of obstruction should be divided into two classes, the acute and chronic. In acute cases medical measures should be tried but not continued too long. If the symptoms are urgent, the surgeon should be called at the end of forty-eight hours; the sooner the abdomen is opened the better. In the chronic cases we may wait a considerable time, even until the symptoms become acute; the treatment should then be that applicable to a case of acute obstruction. He had largely given up lumbar colotomy, which he had employed more particularly in rectal obstruction, and resorted to inguinal colotomy, as a simpler and not more serious operation in most cases.

Dr. Senn, in closing the discussion, stated that there was not the least danger in the use of hydrogen gas. He had performed many experiments on animals, and had used the procedure in man. In cases of intestinal perforation it aids the diagnosis, and allows the surgeon to determine whether or not all the openings have been closed. In a recent case of gunshot wound eleven openings near the ileo-cæcal valve were closed, and a twelfth was revealed by the hydrogen gas, at the point where the peritoneum is reflected from the bowel to the bladder. The patient is doing well one week after the operation.—*Med. Record—Practice.*

THE FORMATION OF AN ARTIFICIAL URETHRA FOR PROSTATIC OBSTRUCTION was the subject of a paper by Dr.

Hunter McGuire, of Richmond, Va. The author limited his paper to a consideration of surgical interference in that class of cases in which the obstruction is great and fixed; micturition frequent and difficult, perhaps impossible without the aid of the catheter. The introduction of the instrument grows more and more difficult. Offensive residual urine is always present, and the general health suffers greatly. Cystitis, localized or general, is a painful and pronounced symptom. Violent tenesmus of the bladder, provoked by the obstruction, injures the vesicle ends of the ureters, possibly a reflux of stale urine is driven into these canals, and ureteritis follows, then pyelitis and pyelonephrosis, from which the patient dies.

Two cases were cited upon whom he had performed the operation introduced by him. One of the case was a man sixty-five years old, who had a second cause of obstruction—a well-organized stricture in the membranous portion of the urethra. Prostate was enlarged and more marked on the left side. Urine showed no evidence of renal disease. An oxalate calculus, three-fourths of an inch in diameter, was also recognized. The high operation for stone was performed. The bladder walls were found thick and unyielding and contracted. The left side of the gland jutted into the bladder one and one-half inches further than the right side. The middle lobe was of the size of the thumb, and almost completely closed the urethra. It was decided to retain a fistulous opening through which urination could take place. This tract was two and one-half inches long, and extended upward and forward. In its passive state it was closed by the pressure of the parts through which it passed. When the bladder became full and contracted, the urine was forced through the fistulous tract. He can now retain water for two or three hours, and has voluntary

power both to retain and to expel urine.—*Med. Record—Practice.*

PREGNANCY AND OPERATIVE SURGERY—THEIR MUTUAL RELATIONS.—Dr. L. McLean Tiffany, of Baltimore, concludes:

1. Pregnancy is a physiological condition, and does not contra-indicate a surgical operation.
2. During pregnancy temporary strain may be exerted on some organ, e. g., kidney, inducing impairment of function.
3. A surgical operation upon a pregnant woman is to be conducted so as to avoid inducing abortion, in itself a serious accident.
4. The main cause of abortion after operation is sepsis.
5. The probability of sepsis after operation is increased if the patient is suffering from disease, either temporary or chronic.
6. Abortion may result from operation—shock, perhaps.
7. Hemorrhage does not seem to induce abortion.
8. Union of fracture may be retarded by pregnancy.
9. Recorded cases show that the unborn child receives no evil impress when the mother is subjected to operation.
10. When a surgical operation upon a pregnant woman is under consideration, the function of all the patient's organs must be carefully investigated and regulated. An operation then conducted antiseptically may be expected to result as though pregnancy were not present.

Dr. J. Ewing Mears, of Philadelphia, thought that while pregnancy was to be regarded as a physiological process in the native woman, it could not be considered in this light in the society woman. Another important point to be considered was whether the operation required was one of expediency or of necessity. In the latter case, the

surgeon must do his duty, let the result be what it may, but whether or not operations of expediency were to be performed on the pregnant woman was a question only to be decided by further experience.—*Med. Record—Practice.*

DRAINAGE IN ABDOMINAL AND PELVIC SURGERY.—Dr. J. Price, of Philadelphia, believes it is better to leave in a drainage tube in every case, even when there at first appeared no necessity for it, for sometimes after the operation there is an effusion of blood greater in extent than the peritoneum can absorb. He preferred to fill the tube with antiseptic cotton, which should be frequently changed. He advocated syringing the abdominal cavity frequently with water through the tube. He deprecated antiseptics in the abdominal cavity, which always cause pain and adhesions. He could not see the advantage of draining through the pelvis.

Dr. Montgomery, of Philadelphia, did not agree with Dr. Price in advocating drainage tubes in all cases. The necessity for them depends greatly on the condition of the patient. Diminishing the diet helps absorption, and tight bandaging lessens venous oozing. He recommended putting a rubber apron over the dressing, with a small slit for the tube to pass through. In some cases he was strongly in favor of vaginal drainage.

Dr. Marcy, of Boston, thought that the drainage tube often failed to protect the patient. He had not used one for two years, because he has not had a case in which he had not succeeded in making the peritoneum aseptic. When he did use one, he would certainly drain through the vagina. His own drainage tube is a return flow.

Dr. Clarke, of Cambridge, and Dr. Vander Veer also advocated the vaginal drainage. The late Dr. Peaslee owed a great deal of his remarkable success to vaginal drainage.—*Med. Record.*

PELVIC ABSCESS.—Dr. T. Gaillard Thomas, of New York, has found three forms of pelvic abscess: 1. Inflammation of the broad ligament. 2. Of the cellular tissue between the vagina and the posterior part of the uterus. 3. The cellular tissue between the bladder and the uterus. Another form is that which is treated as pyo-salpinx. He thinks that the hazardous operation of laparotomy could often be avoided by opening and draining through the vagina. He thinks that many hard tumors, if explored, will show the presence of pus. The man who waits for constitutional symptoms in pelvic abscess will wait a long time. There are but two passages by which pus ought to be let out—through the vagina and the abdominal wall. If the abscess points and clamors for an outlet through the rectum, I do not think it should be allowed to do so. I have seen two cases in which the patient died from evacuation through the rectum. Gases and faeces passed in through the opening. The evacuation should certainly not be made in the bladder. I use Goodell's modification of the German dilators, and always insert the drainage tube. If the abscess is anterior to the uterus, I separate the anterior vaginal wall precisely as I do in uterine extirpation. Pelvic abscess is almost always immovable; neoplasms, movable. This is the great diagnostic difference. Yet some pelvic abscesses are very movable, especially those posteriorly situated. Hence, many are diagnosed fibroid tumors, and cured by electricity. I use bichloride, 1 : 1.000. If the symptoms do not disappear, I use stronger, bnt with fear and trembling.

Dr. W. Gill Wylie, of New York, thinks cellulitis has always played too great a role in the etiology of pelvic abscess. Many abscesses, four out of five, occurring within a year or two after delivery, are due to salpingitis or ovaritis, and our best proof is from those who have opened the abdomen,

Great mistakes are made by not distinguishing between those due to septic poison and ovaritis or salpingitis. It is of no use to open the vagina and leave a rotten ovary there. My views are, if you have pelvic abscess, patient dangerous, temperature 101° F., and sweating, I would open the vagina or belly at once, and find out just what can be done by the vagina. I have done it often, and if closed soon the danger is small. One patient died in New York, one in Chicago, from using an aspirator in pelvic abscess.—*Med. Record—Practice.*

ELECTRO-THERAPY IN GYNECOLOGY.

—Dr. George J. Englemann, of St. Louis, spoke particularly of galvanism as an adjuvant for surgery. He did not think surgery should be supplanted by electricity. A very important factor in certain classes in the electrical treatment was the ability of the patient to go about and attend to the usual duties of life. If a final resort to the knife is necessary, the electricity has put the patient in a better condition. Indurations, inflammatory products, interstitial inflammations and neoplasms are proper subjects for this treatment. He thinks a trial should be made of electro-therapeutics before operation is resorted to. After a few sittings we are able to decide whether we can proceed with benefit or not. He reported several cases from the Berlin clinic. One thing greatly in favor of the treatment is the favor by which it is held in the opinion of men known to be strongly in favor of surgery, viz., Keith and Martin.—*Med. Record—Practice.*

RETROJECTIONS IN GONORRHOEA.—Dr. Edward Palmer, of Louisville, Ky., has used with success bichloride and hot water irrigation with a Keifer nozzle twice or three times a day. The bichloride should not be stronger than one to ten thousand at the most, and usually much weaker—about one to

thirty thousand is most likely to prove best; strong injections, as one to five thousand, are likely to do much harm. The value of this treatment is not so great as its advocates have claimed, and it is best when it is used in connection with the ordinary astringent injection—"mixed" treatment, as the author described it,—and such astringent injection will usually be found necessary to complete a cure.

Dr. Sturgis had obtained only negative results with the hot water and bichloride retrojections. The "mixed" treatment, he thought, detracted from the value of the results attributable to retro-injection.

Dr. Bangs got favorable results after he had learned skill in using the irrigation. Cold water is as good or better than hot.—*Med. Record—Practice.*

THE CLIMATE OF COLORADO IN ITS RELATION TO PULMONARY DISEASE.—Dr. S. A. Fisk, of Denver, has had so many cases of the cure or arrest of disease under his observation that he cannot refrain from making some statements on the subject. On account of there being no large bodies of water on the eastern side of the mountains in Colorado, and the drainage being mostly subterranean, the climate is extremely dry; the elevation of the region resorted to by invalids varies between three thousand and eight thousand feet or more, so that the elevation may be regulated by the needs of the patient. The effects of elevation, of the small amount of humidity, of the large number of sunny days, in Colorado, were dwelt upon at length. In the winter months the variations in temperature are extreme, and in certain situations in the summer the heat is often great.

The velocity of wind in Denver, contrary to the frequently received opinion, is not often very great; and in this Denver will compare favorably with the Connecticut Valley. The dust-storms are at times however, sufficiently

severe to be detrimental to invalids if exposed to them. Fogs are almost unknown. He questions if elevation is any assurance of the absence of germ-life. Putrefaction and decay may be found, where other appropriate conditions are present, anywhere in Colorado.

Dr. S. E. Solly, of Colorado Springs, mentions the danger of elevation in cases of fatty degeneration of the heart muscle. In persons under thirty years of age, with dilatation of the heart, the greatest caution should be used to live carefully and not to take too much or too violent exercise. When the heart is normal, although its action is at first increased, after a time it invariably returns to its normal condition. He recommends the place (Colorado Springs) for arresting threatened tuberculosis; fibroid phthisis also does well. Renal complications make the change to Colorado risky. Moderate dilatation of the heart in the young is not a positive contra-indication.—*Med. Record—Practice.*

A PRACTICAL POINT IN THE TREATMENT OF POTT'S DISEASE.—Dr. A. B. Judson, of New York, believes that in the unsatisfactory state of the treatment of Pott's disease, it would be well to judge of the efficiency of mechanical treatment by the impression made by the apparatus on the skin covering the projection. He thought the object of treatment was three-fold—to fix the diseased bones, to transfer pressure from the bodies to the processes, and to reduce deformity. If the skin near the summit of the projection becomes thickened and callous, which it does without discomfort if the pressure is carefully increased from time to time, it is to be considered that the apparatus is acting as it ought to, and when the greatest pressure is made compatible with the integrity and comfort of the skin, the apparatus has reached the limit of its efficiency. This rule is less applicable to the treatment by suspen-

sion and the plaster-of-Paris jacket. He would not say a word against the plastic apparatus. In the hands of the general practitioner plaster-of-Paris gives relief to many cases which would otherwise have no mechanical treatment. But the orthopedic surgeon can do better by the use of tractable steel modified to fit the varying needs of the patient with the mechanical skill which belongs to practitioners of that class. The author further agreed with Dr. Shaffer in the importance of avoiding, as much as is practicable, the application of water to the skin which is subject to pressure.—*Med. Record—Practice.*

CLIMATE AND BRIGHT'S DISEASE.—Dr. J. L. Wilson, of Philadelphia, says renal disease prevails most where the heat for the greater part of the year might be called temperate. Change of climate in chronic Bright's disease is of great value, and is, perhaps, as important as in consumption. Little notice is taken in text-books of the change of climate. The dangers of abrupt changes of climate or of long journeys by rail must not be overlooked.

Dr. Taylor, of San Antonio, emphasized the value of change of climate in Bright's disease in going from the northern to the southern part of the United States.

Dr. Solly, of Colorado Springs, said sending cases of Bright's disease to high altitudes was usually dangerous, but he had seen cases do well in Colorado. He believes the chief point to be thought of is the action of the skin and the effect the climate will have upon that.

Dr. Loomis remarked that his advising change, or not, in these cases, has depended upon the condition of the heart; when we have signs of heart failure, we are risking the lives of our patients by sending them away.—*Med. Record—Practice.*

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ORIGINAL COMMUNICATIONS.

AMOUNT OF PROOF REQUIRED IN CRIMINAL CASES TO SECURE ACQUITTAL, WHERE THE DEFENSE IS INSANITY, AND ON WHOM WILL FALL THE BURDEN OF PROOF.

BY C. LEONARD WHITMIRE, M. D., SUBLETTE, ILL.

The question of insanity as a defense in criminal procedure has now become a subject of universal interest. The recent trial of Guiteau, associated as it necessarily was with the recollection of a murdered president, directed public and professional attention toward this particular plea and gave it an importance it had hardly known before.

So universal was the detestation of the prisoner that it seemed almost natural to look upon any defense that might be interposed in his behalf as only a scheme for securing his acquittal. It is not wonderful, therefore, that it was subjected to unusually harsh and severe criticism. Ministers denounced it from their pulpits. Physicians, renowned for their humanitarian spirit, lawyers of national reputation, teachers of the broadest philanthropy, the public, and especially the press, spoke of it with derision and contempt, and some went even so far as to declare that insanity in none of its forms should be allowed to constitute a defense in a criminal prosecution. But, due allowance should be made for these exaggerated expressions, coming as they did at a time when men were intoxicated with passion and fired with

rage. When the blood has had time to cool, when prejudice gives way to reflection and deliberation, it will always be regarded as a most wise provision of the law.

It is well that changing public opinion is not the criterion by which criminals are brought to justice, else mob spirit would control in the jury-box, while passion and prejudice would tarnish and corrupt the judicial ermine.

Looking at the question from the standpoint of good law, we find the principal supreme court decisions capable of being divided, for convenience, into *three classes*—two of them throwing the burden of proof upon the defendant, the third upon the State.

The *first* holds that the defendant must establish *insanity* beyond a reasonable doubt in order to be acquitted, while the *second* declares that only a preponderance of evidence is necessary (32 Ia. 50). The *third* class, which throws the burden upon the State, requires that the prosecution must prove the *sanity* of the prisoner beyond a reasonable doubt or he will be entitled to acquittal. (16 N. Y. 58.)

Of these three classes of decisions the first is only upheld in England—

the two latter in America. The first is the most ancient, and in the order named they represent, in my judgment, the progress of civilization, and indicate the advancing humanity of the age.

The first class may be dismissed with the statement that it receives no recognition here, and that it is in more keeping with that historical epoch which made laws to punish witches, and under which enactments over five hundred innocent victims suffered death in the space of two months. The adherents of the second class base their conclusions upon the ground that the defense of insanity is a special plea, in which the act is admitted and the consequences of the act avoided—or, as it is technically called, a plea in confession and evidence. Therefore it is claimed: The prisoner must furnish the burden of proof as he must do in the case of all other pleas of confession and evidence. It is an absolute denial of every thing in the indictment. His plea is "not guilty." "I am not guilty," says the prisoner. "I did not commit the crime, because I was insane." This is founded on the legal principle that an insane man cannot commit a crime. But is this principle true? Let us see, for it is one of the premises on which our conclusion rests. The chief elements of every crime are the *act* and the *intent*. (Blackstone Com., 195.) These can never be separated. There must be a joint operation of the criminal act with the intention to commit the crime, or criminal negligence, which amounts to the same thing, or there can be no crime. One may conceive the idea of

committing some horrible offense against an individual—he may fully intend at a specified time to commit the crime and carry it out in all its hideous details; and yet if no overt act is ever done he can never legally receive punishment. Morally, he may have done wrong, but legally he has done nothing to be punished for. The law cannot go back into the mind and investigate the conscience. She leaves that work for a higher power and concerns herself with more material duties. The same is true if the act be done and there is an absence of criminal intent, there can be no crime. A may plunge his dagger through the heart of B in broad day light, and yet if there is an absence of criminal intention in the performance of that act he commits no crime in the eyes of the law. The act is there, but the intent is wanting. The two must be united. They cannot be separated. One is as necessary as the other to constitute a crime. An insane person cannot have this criminal intent. The functions of the brain are impaired or lost—thought, feeling, will. As these are the sources of intent, the intent is wanting. The mind is a blank. He is incapable of judging of the nature, character or extent of any offense he may commit. His mind does not concur with the act in the sense of a criminal action, and, therefore, he is incapable of committing crimes.

It is claimed there is a legal presumption of sanity, and as sane men are presumed to intend the results of their acts, so the state need only establish the act itself. The presumption is true, but the conclusion is wrong. In

the prosecution of a person charged with murder there is a presumption of malice, but will this relieve the state from the necessity of showing malice when this is brought into question? No. The state must show malice beyond a reasonable doubt. And so, when the presumption of sanity is brought into question the state must establish the sanity of the defendant beyond a reasonable doubt, or else release him according to Blackstone.

Murder is the killing of a reasonable creature by a person of *sound mind* with *malice aforethought*. This will illustrate the point. Sanity is as much an ingredient in crime, as malice is, in the above. It is as necessary to averment and proof as to the act itself. (40 Ill., 358.)

This brings us to the argument of reasonable doubt. It is an old and well-established principle of criminal law, that after the jury has listened to and fully considered all the evidence in a case, if there still lingers in their minds a reasonable doubt as to his guilt, they must acquit, for it is better, say the legal authorities, that ten guilty men should go free than that one innocent man should be punished. This right can be claimed by the deepest-dyed criminal in the land, and it would seem to be the most glaring piece of inconsistency to refuse the same right to that class of unfortunates from whose minds intelligence has departed. Since an insane man can not commit crime, a doubt as to sanity is doubt as to guilt, and, under the general rule, acquittal must follow in every such case. "The burden of proof is upon the government to show guilt beyond a reasonable

doubt, whatever the defense may be." (40 Ill. 358.) All the prisoner need do, is to raise a reasonable doubt as to his sanity, and then the state must offer sufficient contradictory testimony to overthrow that doubt, or he will be entitled to acquittal.

It is held, too, by some, that on account of the general presumption of sanity, the burden must shift to the defendant. But this is not true. Such a presumption will not cause the burden of proof to *shift*. They who claim that it does so shift, use the term "burden of proof" unadvisedly. They probably mean by the expression, that the presumption of sanity is sufficient *prima facie* evidence to warrant conviction, if no evidence is offered casting a doubt upon this point. They interchange the terms when really their definitions will not warrant the interchange. They mean entirely different things. The latter is that character of testimony which determines on whom will fall the verdict, if unrebutted. Burden of proof is the duty of proving certain facts in issue, and that party has the burden against whom the verdict would fall if no evidence were offered, or unsupported allegations were stricken from the record. *Prima facie* evidence will shift from one side to the other during the course of a trial, but burden of proof will never shift. It is always with the state, even where the allegation of fact is negative in character. (25 Tex. 323.) It would seem to be the true rule in criminal cases, that the burden of proof is with the government throughout. (1 Greenleaf's Evidence, sec. 81.) It was held in 117 Mass. 143, that the burden was upon the state of

proving every essential element of the crime charged, and the presumption of sanity will not cause the burden to shift. (31 Ill. 385.) Indeed, if the burden of proof were allowed to be shifted, and thus make the prisoner prove his insanity, either beyond a reasonable doubt or by only a preponderance of testimony, it would be establishing a principle opposed to and antagonistic to that humane rule which requires guilt to be established beyond a reasonable doubt.

There is another presumption in law bearing upon this question. It is the presumption of innocence. This is an ancient and time-honored protection for one charged with a criminal offence. It is the shield of justice held between the prisoner and the indictment, by which it makes it necessary to fully prove the crime, or he is entitled to liberty. It is founded in reason and humanity, and any doctrine which seeks to deprive him of its protection by compelling him to assume the burden of

proof, or depriving him of the benefit of the doubt, is an effort to undermine at once the very foundations of good law.

What is meant by insanity is as different and various as there are classes of people who use the term. There are many ideas conveyed by the term, from the rigid, cast-iron rule of the lawyer, to the broad and general definition of the philanthropic physician. Boileau declares all men to be insane, the difference being only in the degree of skill with which they can conceal the crack. Haslam, the greatest expert of England, testified in open court that he had never seen a sane man in all his life. "God" he claimed to be "of sound mind and he alone." A man to be insane in law must have his free agency affected by mental disease in the relation to the act with which he is charged. His responsibility, or free agency, therefore sometimes becomes a very difficult and perplexing question to decide, owing to the numerous and varying shades of insanity.

*SCROFULA.

BY J. H. WALLACE, M. D., MONMOUTH, ILL.

The latest approved definition of the term scrofula is that adopted by Pepper's System of Medicine, viz.: "A morbid condition of the system, manifested by a peculiar liability to attain forms of nutritive disorder of the skin, mucous membranes, joints, bones, organs of special sense, and especially the lymphatic glands."

It has been very justly observed that "there is a certain maturity of the human mind acquired from generation to generation in the mass, as there is in the different stages of life in the individual man." What is history, when thus studied, but the faithful record of this progress, pointing out for our instruction the various causes which have

retarded or accelerated it in different ages and countries? Principles of research, combination of methods, investigation of diseases and their remedies, and problems involving the phenomena of life are unavoidably embarrassed by circumstances complicated in their nature and fluctuating in their operations. Hence, both observation and experiments in the study of diseases and their remedies are liable to a thousand fallacies.

As Lord Bacon remarked, the human understanding is not a mere faculty of apprehension, but is affected more or less by the will and the passions. What man wishes to be true, that he too easily believes to be so; and I conceive that medicine has, of all the sciences, as little pretensions as any other to proclaim itself independent of the empire of the passions.

Blind devotion to authority and established routine has always been the means of opposing the progress of reason, the advancement of natural truths and the prosecution of new discoveries. To give currency to an opinion as to the origin and the pathology of certain diseases, or medical reputation to an inert substance, seems to require only the aid of a few reputable names, and, when once established, ingenuity, argument and experiment may open their ineffectual batteries. There exists a fashion in medicine, as in other affairs of life, regulated by the caprice and supported by the authority of a few leading practitioners who are in the habit of discussing certain ideas or classifications and adopting others of questionable nature. As years and fashions revolve, so these in turn, like

old almanacs, are abandoned until the period may arrive that will once more adapt them to the spirit of the times.

Such is and has been the attitude of the profession, largely, in reference to scrofula,—quoting authority after authority, or rather, I should say, author after author, expression after expression and page after page from old, obsolete works, to establish the fact beyond contradiction that scrofula is nothing more nor less than syphilis gone to seed. Dr. John S. Lynch, one of the latest authorities, includes in his definition of the disease, disorder of the bones, to which we would take exceptions, as their affection is only secondary, and might occur as a secondary disease in any other disease or injury to the synovial or periosteal membranes. In his essay, alluding to the past, he quotes Hal as aptly remarking that scrofula becomes the receptacle into which one vaguely casts all the ailments which afflict children under fourteen years, and of which we do not know the cause. Even the occurrence of lice, worms, cancer and diabetes have by some been classed as the offspring of scrofula, and scrofula as the grandchild of syphilis, while others attribute all scrofulous affections, as well as many others not scrofulous, as manifestations of hereditary syphilis,—or, in other words, the great-grandchildren of syphilis. Scrofula is essentially and purely a diathesis or disposition predisposing to other disease, and not a disease in and of itself. Niemeyer says that “the idea that scrofula depends upon a faulty composition of the blood, and that the lesions formed in scrofulous persons were due to a deposit in

the tissues of a matter circulated by the blood, and called a scrofulous material, is almost universally abandoned."

Formad, of Philadelphia, declares that microscopic examination of the tissues of children known to have been scrofulous discloses the fact that the lymph spaces in these subjects are always more numerous, larger and more crowded with cells than in non-scorfulous subjects. The tissues are coarser, less compact and less solid, and there is a greater tendency to excessive cell growth than in the non-scorfulous.

That this peculiarity of structure is in many instances inherited from the parents, none can deny; but, as is claimed by Formad, it is not the essential factor in the etiology of scrofula. Daily experience teaches us that a bad state of nutrition is usually accompanied by a feeble power of endurance of noxious influences. Reasoning from cause to effect, it is usually understood that feeble, badly-fed persons are sickly; that they are especially prone to disease, and they do not recover as rapidly from its attacks. Unhealthy surroundings, overcrowding, want of fresh air, improper food, or food improperly prepared and dispensed. Formad claims that too much starch during the early months, or even the early years, will cause the growing tissues to assume that peculiar anatomical arrangement and character above alluded to. Niemeyer (vol. 2, p. 760) says; "First of all in the acquired disease stands improper nourishment;" a coarse diet, containing but little nourishment in comparison with its bulk, being very properly held in especially evil repute. "The earlier this injudicious feeding of

an infant commences, so much the greater is the danger that it will be scrofulous. Hence, children fed on pap furnish a very important contingent to the army of scrofulous persons." Lynch and others would impress the idea that starchy food is largely responsible for this condition, and cite, as a well established fact, that but few children at the breast suffer from scrofulous lesions, but that a large number do so within the first year or so after weaning, which he attributes to too much starch and too little animal food, which results directly in faulty nutrition and construction of the tissues, which lies at the basis or foundation of the scrofulous diathesis. The lymph spaces being more numerous and more crowded with cells, and a greater tendency to cell growth, there is naturally a greater disposition to inflammatory action, more rapid metamorphosis of tissue and less effort at resolution than in the non-scorfulous subjects. Hence, the enlargement of the lymphatic glands and subsequent suppuration so common in persons of a strumous diathesis.

The alterations which take place in the skin, mucous membrane, joints, organs of special sense and the lymphatics can not be distinguished from non-scorfulous affections of a similar character, except by the tediousness of the course and difficulty of management. It is claimed to be impossible to discover the difference in the characteristic features in an eruption of a scrofulous nature or gouty swelling and similar non-scorfulous affections. Even the cheesy transformations which are so liable to occur as products of inflammatory action, are by no means proof

positive of scrofulous origin, but are common to destructive changes going on in diseases of a chronic character. Sajous, who is recognized as high authority on diseases of the nose and throat, says that "Scrofula frequently attacks the mucous membrane of the eyes, nose, ears and throat. It finds its origin in a weakness or depressed state of vitality. It may be general debility or the enfeebled state may have been inherited,—hence, resistance to external influence is diminished. Again, it may be a sequel to eruptive affections, such as measles, scarlatina, diphtheria, small-pox, etc. Polyps are often found growing on the mucous surfaces, but no underlying dyscrasia, syphilitic or scrofulous, seems to influence their growth." The condition, or diathesis, may be brought about by syphilis, as well as by other means,—as in case of mal-nutrition, for instance.

But in the case of hereditary transmission the parents do not transmit the dyscrasia or habit of body, as is the case in congenital or hereditary syphilis, but simply the diathesis or predisposition. And even after a chronic non-inflammatory enlargement of the lymphatic glands has taken place, knotted together in shapeless lumps, characteristic of the disease, no foreign element can be detected in them under the microscope. They are not tubercular, but the product simply of hypertrophy, cell multiplication or cellular hyperplasia. The scrofulous diathesis is liable to be confounded with general debility—debility existing without any scrofulous tendency, more than the mere diathesis. On the contrary, the scrofulous diathesis may be conjoined

with muscular power and mental activity, but whichever state exists, if there is an existing diathesis, it is invariably conjoined with perversion of the nutritive activity of the body. And in all varieties the disease, under whatever form, condition or circumstances, the digestive organs will be found weak and irritable. This condition of the digestive organs must be regarded as one of the most essential conditions, or as a constantly prevailing condition, connected with the strenuous diathesis, tending greatly to the impairment of nutrition. Locality, climate, season, age, sex, condition in life or social position, consanguineous marriage, complexion and temperament, race and nationality, are all supposed to be predisposing causes for the development of scrofula where the diathesis already exists. A further illustration may be made, as follows; An enfeebled condition, obtaining from malnutrition of the foetus in utero-gestation, or a faulty anatomical construction of the heart, preventing proper aeration or oxygenation of the blood; an enfeebled condition of the circulation from any cause; improper elimination of effete material from the system, one particle of matter lodged in the tissues or glands of the system forming a nucleus around which other molecules may cluster until in turn an irritation is set up in the glands and consequent inflammation and final suppuration takes place.

Our etiology would be very incomplete without the consideration of tuberculosis in connection with scrofulosis, as it is held by many eminent authorities to be one and the same disease. Under different circumstances

or conditions, at the same or different periods of life, scrofula, as above considered, is a diathetic disease or predisposing condition inherent in the individual, a fixed state or constitution, something innate, naturally pertaining to the individual; while tuberculosis is a cachectic or ill-conditioned state, vitiated or having an ill habit of body. Gross says, a tubercle in the lung is essentially the same thing as a tubercle in the bone or a lymphatic ganglia, having the same origin, running the same course, and producing the same results, and we admit it. Again, he says: Microscopically examined, a tubercle consists of a transparent matrix, inclosing granules, nuclei, cells and oil globules; and we admit it—but what does this prove? Nothing. Nothing, whatever, in reference to the identity of the two diseases. Other pathologists say, that while all caseation may not be tuberculous, true tubercles are often found in scrofulous lymphatic glands. And they admit that the scrofulous diathesis may be acquired without inheritance, and add, that change of climate from warm to cold, or damp, will induce it. We admit this much in reference to tubercles in order that we may not shut it out in the discussion of this paper, hoping, if in no other, we may disprove, in a negative way, at least, its immediate relation to scrofula. We do not deny

or dispute the fact that tubercles may and do occur in scrofulous subjects, and are found in scrofulous ulcers at times that the disease, scrofulosis and tuberculosis, may prevail in the same individual at the same, the one as a diathetic and the other as a cachectic disease. The fact that tubercles are found in scrofulous patients does not prove the identity of the two diseases, or that they are of the same origin. We will even go further, and assert that it never has been proven that a single case of syphilis has terminated in scrofulosis. Syphilis is syphilis wherever found, in any or all its forms. We have seen syphilis in many of its forms, and in the congenital form in its worst degree, and we are assured that the iniquities of the fathers are visited upon the children until the third and fourth generation.

We fail to recognize syphilis as the prime factor, when it is admitted by authorities on the subject, generally, that the diathesis may be acquired in other ways and by other means, and such has undoubtedly been proven, free from any show of responsibility to syphilis. If, as some advocates claim, it is the result of syphilis, either directly or indirectly, hereditary or non-hereditary, we need a new nomenclature, for language only makes the subject mysterious, and mystery is the soul of empiricism.

DR. J. C. DA COSTA prefers silk ligatures to any other form in operations upon lacerated cervix, as strong and never causing serious effects. In

one case the suture accidentally remained six weeks without any evil result.—*College and Clinical Record.*
—*Practice.*

***TYPHOID FEVER.**

BY W. R. ALLISON, M. D., GOOD HOPE, ILL.

Much has been written with reference to this disease; many theories advocated, and a great diversity of opinion still exists; and since there is no place where it may not be developed and spread, I take it that I will come nearer engaging your attention and fulfilling your expectation by discussing some subject of vital interest to us all.

The extent of the subject and the limitation of this paper requires the omission of much that is important, but we endeavor to set forth the facts, frank in the admission of the weakness in which the most skilled physician stands while answering the queries of this disease. We ask your indulgence when we for proof may quote from able authors, and, impressed from this fact, based upon the researches of men that wherever and whenever typhoid fever prevails, whether in a family, neighborhood, city or town, there exists in that locality a septic cause and not in the form of unsanitary condition either in the water consumed or the air breathed by the inhabitants infected.

While observation has clearly proven that animal or vegetable decomposition alone is not sufficient for the development of this disease, then with these facts before us we are called upon to look for and expect a factor more potent as causing this fever.

And since it is proven beyond a doubt that there is a microbe that is the cause of this disease, and that its presence is only found in the tissues of

those who show evident signs of typhoid fever, I think it proper then to concentrate our energy and contribute our mites, that we may be more thoroughly fortified, and as such we will then be better prepared to treat this evil.

We find the bacillus of typhoid fever in the faecal discharges of the sick typhoid patient. But at this time it is inactive and must pass through a stage of development outside of the body. We are told that this development is more rapid when brought in relation with organic matter, or better, with soil saturated with organic matter, and since the discharges are mostly thrown into privies, we readily find an easy means of the propagation of the bacillus to the fountains and wells, as well as the rivers, where they are capable of multiplying, and these, acting as vehicles, carry the bacillus long distances from the place whence it was contaminated. And now, having isolated the microbe and proven its ability to develop this fever, we must study the way and means of its arrest, and, being desirous of the destruction of these germs, we study the best aids at our command, and how to find the bacillus in an inactive or undeveloped state at the time they are discharged with the faeces. We would expect to realize the greatest amount of good from germicides, and I hold it the duty of every physician in all suspected cases to demand of his patient to use a vessel containing a solution of carbolic acid or corrosive sublimate of the popular

strengths and a total destruction by fire, and also to discourage the burial in dry earth, for this is the safe planting of the germs for growth and great multiplication.

We find it necessary to bring strong measures for destruction, for the germs have great powers of resistance. True they thrive best in a temperature of from 25° to 35° C., but the cold of winter, on the other hand, is not so great but that it is resisted, leaving the germs to reappear in their usual manifestation at some other time and going far to mislead us in declaring this fever to be spontaneous.

When once the germs have developed we have a problem of greater difficulty to solve, and as the history of epidemics proves that water is the great source whereby the bacillus is carried from the sick to the well, it is natural that this part should first receive attention, and as the light of investigation has taught us that one of the most successful means of destruction to the colonies is, as we may term it, by starvation, and as the bacillus thrives upon and dies for want of solids and organic matter, we can do much to lessen their nourishment.

First—By educating the nurse that typhoid dejections must be destroyed and not hid away.

Second—Preserve the well and free the water from the excremitious material found in privies; (*a*) first, by the careful location of privies in such localities as not to be probable that it may drain itself into the wells; (*b*) second, by a proper arrangement of privy vaults.

Third—By filtration. Not that the

filter will remove the microbe, but by filtering out a part at least of the organic matter of the water, lessen the growth and development of these germs. And so may these rules be applied to the water system of our cities with their yet imperfect means of dealing with these germs when once they have been poured into the sewers, carried from this point onward, infecting most every inhabitant that is connected with the system below this point of contamination, until at last we trace the germ from its early life until it finds a ready means of entering the exposed individual, which may be the air we breathe or the water we drink; and no sooner the reception of the germs than war between cell and microbe begins. The microbe being the intruder, must, to bring about pathognomonic symptoms, be victorious, and since we learn that it is impossible to receive a sufficient amount of the poison at one time to produce its toxic effects, while the history of cases demonstrate the onward progress of the fever, can we not accept the demonstrated facts that the microbe gains an entrance and finds within a suitable locality for growth and development of colonies? At first, as the colonies produce their progeny, the vital forces of the body, at first able to destroy; and as a result of the war the body is overcome by the growth and development of germs of typhoid fever, while the length and severity of the attack depends upon the prolific ability of the bacillus, as well as the combatting forces of the individual infected; and whether the symptoms are caused by the presence of the bacillus or the death of these, we are unable to say.

But this much proven and accepted by a majority of the profession, offers a rational search for an antidote. And here let me add that we will not give in detail the whole treatment of this poison, but briefly speak of those points that have most greatly impressed themselves upon us, either from a misconception of their therapeutic action or a routine mode of treatment without knowledge of the disease.

I am of the belief that those who so greatly laud large doses of sulphate of quinine as the best antipyretic and ascribe to it all the praise as an antipyretic are wrong, for we all know the facility it has for destroying the germs of low life and if there is truth in this why not prescribe quinine for its germicide and antiseptic properties.

Calomel, so far as advocated as a laxative, is good and as it is converted into corrosive sublimate we may then ascribe to it a double purpose—first, removing the intestinal contents which lessen the chances of multiplication of the bacillus in the alimentary canal and, secondly, saves and protects the system from the absorption or invasion of the bacillus in the colonies.

Clinicians are rife in protesting the beneficial results of a daily evacuation of the bowels and have noticed a reduction in the temperature as well as an amelioration of the symptoms of the individual at large when the loaded bowels are emptied of their contents, and if the symptoms are in proportion to the amount of the poison and vary with it, have we then not found another factor that has been overlooked to great an extent which may easily be

overcome by an enema properly administered, carrying with it the precaution that should be obeyed in the administration of it.

Then again the parenchymatous changes so characteristic to this disease have been by some of our best searchers attributed to a greater extent due to the presence of these germs than to the fever. Then would it not be more consistent with the advancement of medicine to dispense to our patients such agents as carry with them germicidal and antiseptic properties expecting great good from Fowler's solution, salicylate of ammonium, carbolic acid and the many remedies that have been advanced as having great antiseptic properties brought about by the destructive influence they have on these germs and was it not for this secondary influence their names would not be mentioned as antipyretics in this fever. Therefore to reason from this standpoint we would expect to abort a case of typhoid fever if we were able to treat the microbe of this fever as we would the infecting germs of disease of an ulcer, but not having the ability to follow the microbe through the tissues of the body with a germicide sufficient in power to destroy it without taking the life of the individual, we must be content to do our greatest and noble work of destruction before it has taken refuge in so tender and yet complete a place of safety and once within the body it behooves us as physicians to be next to godliness which is cleanliness, diluting everywhere with abundance of free ventilation fortifying the strength of

the patient equal to all emergencies, withdrawing as much of the effete matter as consistent, with the aim of reducing the germs of disease. This done with the consciousness of the re-

sponsibility of life and duty we owe to fellowman, discharges a duty that leaves no remorse until future light shall point a more certain way.

*ON PRURITIS VULVA.

BY O. B. WILL, M. D., PEORIA, ILL.

In all cases of pruritis vulva inspection reveals at least one of two general conditions. Either there is present ocular evidence of some disease of the cutaneous or mucous surfaces, or there is not. Nevertheless, the pruritis exists. It is said by authors to be always but a symptom of either well-defined disease of the local mucous or cutaneous surfaces, or disorder in some more remote organ. The same conditions, apparently, with which it is so frequently associated, do not, however, always produce this unpleasant symptom. Indeed do not *generally* do so. Certainly its presence is therefore not pathognomonic of any particular lesion, unless it be an occult one, residing in the nerves of the part affected. I verily think it evident, therefore, that whilst pruritis pudenda and vulvæ is most often associated with pathological conditions of other tissues or organs either near or remote, it is not a consequence of the latter, but rather the evidence of a morbid condition inherent in the nerve-tissue itself, and as truly a disease as the more tangible maladies with which it is so frequently associated and by which it is so greatly aggravated.

The term, therefore is, in my opinion, as much the name of a malady,

practically, as are the names of those local inflammatory and eruptive disorders that are so constantly supposed to stand in a causative relation to it.

Not only is this opinion sustained by the foregoing, but by analogy, and by the results of remedial applications as well. An hysterical paroxysm, for instance, may be induced by uterine and ovarian, or other disease, but not in all individuals, by any means. It is a well-known fact that many women remain perfectly free from any attacks of the kind, although suffering from grave structural or other disease and most horrid displacement. The disease hysteria must, then, lie wholly in the nervous organization of the individual victim of it. It is not enough to say that in such case the nervous system is weak and over-sensitive, and that the disease proper lies in the perceptible local disorder. The manifestations of hysteria may continue to exist long after removal of the apparently local cause, and even prior to and quite independently of any perceptible local disease whatever. That hysteria is a disease of the nervous system *per se* is generally admitted.

Herpes zoster and other manifestations of nerve malady might be cited as analogous. In herpes there is pres-

ent a cutaneous eruption, but neither in extent nor activity does it appear to bear a just relation to the intensity of pain and general exhaustion from which the patient suffers. So with other pathologically obscure diseases of nerve structure. I believe the discomforts of pruritis vulva to be due to a similar disease of at least the terminal nerve tissue itself. Similar, in that it is confined to structural or other change, the nature of which is impreceptible to our present means of research, except through its results. Similar, in that it may, or may not, be accompanied by much if any evidence of disease other than that which is pathognomonic. I believe pruritis vulva to be, if not a proper name for, at least a pathognomonic symptom of, a disease often associated with, even producing, and always when present aggravated by, local inflammatory or other cutaneous disorder or disease. This view is yet more forcibly upheld and emphasized by the fact that the best results of treatment follow the application of certain agents, regardless of the presence or absence, or even particular nature of any local mucous or cutaneous disease. If the pruritic condition were due to the different forms of local disease with which it is often associated, it would be reasonable to suppose that the best results, in so far as relief from its torments is concerned, would follow the use of those agents found most effectual in the management of such local diseases. But as I have said, such does not appear to be the case. Usually an alleviation of the distress is thus secured, but no permanent result obtained. Of course

this statement does not apply to those cases of pruritis clearly due to the presence of parasites, or the existence of short bristly hairs on the internal surface of the labia. The sense of itchiness thus induced is purely mechanical in origin, and somewhat different in character from the pruritis vulva properly so called.

With the foregoing brief statement as to the nature and origin of this pruritic manifestation, as I have been induced to see them, I shall at once proceed to some considerations relative to their therapeutic management.

It is a wise and necessary step in the treatment of pruritis to remove to as great an extent and as quickly as possible all sources of local irritation, tending to aggravate at least the prominent disorder. In all cases I have found it seemingly beneficial to every day first cleanse the parts by the external application, on large sponge, and internal injection, of *hot* water, continued for from ten to twenty minutes. They are then, as I have found, in a better condition for the reception of those medicaments most approved in each individual type of local irritation. Where a condition of vulvitis exists, from whatever cause, presenting a hot, punctuated appearance of the mucous membrane, with more or less weeping or accumulation of mucous, or a comparatively cool, dry, somewhat glazed surface, or where eruptions of any kind or type exist, the very best preliminary application that can be made is that of the peroxide of hydrogen. It has the effect to cleanse the surface of all irritating organic substance and germs, and while at first creating an

unpleasantly hot feeling, subsequently soothes the peculiar sensibility of the parts, is, or seems in my experience to be absolutely curative of the major affection, and places the superficies in the best possible condition for the application of agents curative of the strictly inflammatory trouble. Of the latter, the best and most efficient within my knowledge, except in cases presenting a dry, somewhat glazed surface, occurring mostly in elderly women, is a mixture, thoroughly triturated, of one part, by weight, of boracic acid to seven of bismuth sub-nitrate, applied by means of a powder-blower. In making this application it is desirable to have the patient assume the Sims position, where vaginitis especially exists, and use the Sims speculum, for the entire efficiency of the application will depend upon the thoroughness with which it was made, as regards the covering of every portion of the mucous surface. In the exception above referred to, where dryness exists, I have had better results, I think, following the alternate application of boro-glycide on cotton, and the sub-nitrate of bismuth with a small proportion, say five grains to the ounce, of chloral hydrate. In many cases where the irritation is confined to the vulva, the application of simple vaseline after the thorough use of the peroxide will be the most agreeable and efficient. Such, also, is my experience as regards the several eruptive disorders afflicting the pubic region either as a concomitant or as a result of the rubbing and scratching incident to the pruritic affection.

Of course it is not possible, even if desirable, in a single brief paper to even

refer to all the associate affections laid down in the books as the causes of pruritis vulva. Neither is it possible to enter into a consideration of those primarily uterine or other affections upon which local inflammatory action may depend. These should be observed and treated according to the most approved methods.

My principal object in presenting this subject has been to urge upon those who take an interest in the matter (and what physician does not) the pre-eminent efficiency in the treatment of this affection of two distinct agents, viz: Peroxide of hydrogen, and, in the more obstinate cases, the galvanic current. The former of these I have never seen anywhere mentioned, but it has proven, in my hands, a most efficient agent, not only for disinfectant and cleansing purposes as before mentioned, but also in a directly curative way, as regards its influence, on the terminal nerve of the diseased part. I use it by applying a small pledget of absorbent cotton soaked with it up into the vault of the vagina, to allow the solution to trickle down more or less rapidly over the surfaces below. On the outside, and over the pubes, I apply it on cotton quite thoroughly, and follow it there, as in the vagina, either with the powder above mentioned or the vaseline. These applications may be repeated daily in very severe cases, or subsequently in the former class.

The very prompt and thoroughly efficient action of the galvanic current in this malady, is now becoming pretty generally recognized.

It is applied most efficiently in the strength of about 7 to 10 milliamperes,

by placing a sponge or other covered electrode connected with the positive pole of the battery over the lower abdomen, and some small ball or other metallic electrode covered or wrapped with wet or absorbent cotton over the diseased surface, moving it about slowly slowly so as to include fully the diseased territory.

Although at the time somewhat severe, this treatment is most efficient in the more obstinate cases of pruritis. I have seen cases of pruritis pudenda in which the parts had been as com-

pletely denuded of hair, by the necessary scratching and rubbing, as any portion of the body, completely restored to its normal sensibility by the repeated application of the current in the strength above mentioned.

The presence of pregnancy, under which condition this distressing symptom so often appears, is no contra-indication to the use of electricity. Great care is necessary, however, to have the electrodes as near each other as possible to include the field of superficial irritation, without involving the uterus in the circuit.

*UNUNITED FRACTURES.

BY THOS. M. M'ILVAINE, M. D., PEORIA, ILLINOIS.

Since non-union is a condition which may follow the fracture of any long bone, but especially the humerus and femur, a few moments' consideration of the subject may not be without profit.

The difference between delayed union and non-union of bones is one of time only. The condition is the same in both cases, being that of deficient consolidation of repair tissue, bony or ligamentous, at the seat of the fracture, sufficient to destroy or seriously impair the usefulness and strength of the member. The causes of this condition, however, may vary widely.

If, after the expiration of a period of time in which the surgeon might reasonably expect repair to have taken place, the fragments still move upon one another, the case assumes a more serious aspect for the patient, and the worries and responsibilities of the attending

surgeon are far more than doubled. Especially is this the case in private practice and among the more ignorant classes, where an intelligent explanation of the causes which may have mitigated against a satisfactory recovery cannot be understood.

The two great classes of delayed and non-union of broken bones are constitutional and local, and each of these may be still further subdivided.

The constitutional causes may be: 1st. Old age. 2d. The interoccurrence of certain forms of fevers, as typhoid and the severer forms of malarial and rheumatic. 3d. Pregnancy and lactation may delay the union of broken bones. 4th. Prolonged and unaccustomed confinement, especially in insanitary apartments, and a poor and too frugal diet. 5th. Syphilis is found to be a factor in some cases. 6th. And,

*Read before the Military Tract Medical Society, at Bushnell, Ill., October 23, 1888.

finally, there undoubtedly exists in some a personal idiosyncracy or dyscrasia which prevents the union of fractures, or which delays their union far beyond the period of time which is usually allotted for their repair.

The local causes are yet more numerous, and are given as—1st. Motion at the seat of injury. 2nd. The presence of a spicula of bone or of a muscle, ligament or a large blood clot between the fragments. 3d. Too tight bandaging of the member, which may arrest the circulation in the parts, or may benumb the nervous supply of the same. 4th. Too prolonged cold and moist applications. 5th. Caries, or necrosis. 6th. Suppuration at or around the seat of the fracture. 7th. The pressure of two or more fractures in the same bone may complicate the dressing sufficiently to cause delayed union in at least one of them. 8th. Where the line of fracture enters a joint; the presence of synovial fluid over the broken surfaces may delay or prevent their union.

Other causes may be given, but the above certainly contain the most potent and frequent.

The treatment of the constitutional causes consist in the administration of such medicines as are indicated, and the securing to the patient proper diet, suitable surroundings and in every way building up the general system. If during pregnancy, encourage the patient to hope that the bone will unite after her confinement. If she be nursing, have her wean the child at once, if possible to gain her consent.

The treatment of the local causes does not consist in removing them, but in removing their effects, and placing

the bones in a better condition for the reparative processes. After a bone has refused to unite for a considerable period of time,—as, two or three months—the reparative attempts become sluggish. Nature seems to say, “I can’t make a good, solid union, and there is no use in trying. I will do the best I can under the circumstances, and that will consist in throwing out fibrous or ligamentous bands around the ends of the broken bones, or make a new joint by placing this new and soft structure between their ends.” Here, then, the surgeon must step in and give the good old dame the spur by doing something that will arouse the reparative process to renewed efforts. Perhaps he has heretofore kept his patient too quiet; then he must put on a supporting apparatus, as a leather or plaster-of-Paris splint, and encourage the patient to get out of bed and make attempts to use the injured member, with the hope that the unusual exercise may incite a renewed inflammatory healing process. Or, by forcibly rubbing the ends of the broken bones together, the same effect may be arrived at.

When evidences of a new inflammation are received, which will be recognized by increased pain, heat in the part, and swelling, the member must be dressed as at the receipt of the original injury, and strict quiet enjoined. Should this not succeed, more vigorous measures must be employed, and for this purpose many operations have been devised.

One of the earliest of which I can find any record was the use of the silk seton, suggested by Winslow in 1789, and successfully employed by Physick.

Malgaigne (1837) perforated the tissues connecting the two fragments with an acupuncture needle, but without success.

In 1848 Miller proposed, and successfully employed, subcutaneous puncture by a tenotomy knife, passing the narrow blade between the fragments and scoring the ends so as to freshen them up.

Detmold used a gimlet in 1840, boring through the ends of the bones, and thus exciting the needed reparative action.

Brainard, of Chicago, invented and successfully employed the drill which is known by his name, and which is still in use. It consists in a long, well-tempered steel drill, like an awl, but with a cutting edge on the extremity a little wider than the shaft. This drill is passed down to the bone and several perforations made at and near the seat of the fracture.

Various modifications of Brainard's drill have been devised, but the principle involved and the end aimed at is the same in all, and they need not be further considered in this connection.

The operations just enumerated had for their object the stimulation of the parts to a renewed inflammation, the consequent throwing out of reparative callous and the solidification of the fragments.

A second method of operation consists in drilling both fragments and inserting ivory or steel pegs from one to the other. This has been successfully employed, and is still performed by some operators. A third method is by making an incision through the soft parts, exposing the ends of the bone,

freshening the ends by sawing or scraping them, and wiring them together.

This operation was first proposed by White, of Manchester, Eng., in 1760, but the wiring process is due to Dr. Rogers, of New York, who in 1838 passed the wire through holes drilled in the fragments with the purpose of securing and maintaining exact opposition.

This is probably the most successful in point of recoveries. The mortality statistics of any of these operations I have been unable to find.

I conclusion, I desire to report a case of operation for an ununited fracture of the humerus in which I employed some methods that I have not seen mentioned in connection with this operation.

Mrs. R., aged 25; married; one child; was thrown from a wagon in August, 1886, sustaining a double fracture of the right humerus. One was high up in the upper third, and was complicated by considerable laceration of the soft parts, though whether it was compound or not I did not learn. The other fracture was at the junction of the lower with the upper two-thirds, and was simple in character. The upper fracture united kindly and gave no further trouble, although repeated attacks of erysipelas complicated the healing of the external wound. When the dressings were removed from the lower fracture union was found to be wanting. Various methods were then used to cause the fragments to unite, but without avail. In the latter part of January, 1888, she consulted me, and I found her fairly well nourished, in general good

health, with the deformity noted. As she was yet nursing her child, I advised her to wean it before any operation was attempted. This she did, and returned in the latter part of February for an operation, and entered the Cottage Hospital for that purpose.

On February 29, with the assistance and in the presence of Drs. Hamilton, Miller, Roberts, DuMars and others, I made resection of the bone. Making a long incision on the outer side of the arm, the bone was exposed. Cutting through a fibrous band enveloping both ends of the bone, I found the ends of the bone but slightly enlarged and covered with a fine grit, which could be scraped off with the nail. The fracture was nearly transverse, and the ends were thoroughly scraped with a sharp scraper until all softened bone had been removed and the blood began to come freely from the medullary cavity.

With a common awl I then drilled each end of the fragments, and passed through a suture of kangaroo-tail tendon and tied them tightly together. After cleaning the deep wound thoroughly, I united the muscles by a deep row of cat-gut sutures, and the skin and adipose tissues with silk and an internal splint applied, secured with bandages. The forearm was then placed in a leather trough extending from the elbow to the tips of the fingers, and this was tightly strapped to a leather cap secured upon the same shoulder. The straps were so placed as to cause considerable pressure upon the ends of the bone in the axis of the shaft.

Within 48 hours extensive swelling and high fever came on, and in 12 hours longer erysipelas appeared. It is not necessary to detail the daily progress of the case further than to state that three times during the 18 days following the operation erysipelas reappeared, and extensive suppuration from the wound occurred. Still, perfect immobility of the arm was insisted upon, and the patient not permitted to make the least effort to move herself. The wound was syringed out daily and packed with iodoform and oakum. The probe never detected any opening deeper than the cellular tissues, and on this I still based my hopes of successful termination.

In April the external wound had healed; then I applied well-fitting splints, both external and internal, to the entire humerus, and, with the arm supported by the leather splint before described, I sent her to her home in Wyoming, Ill., with instructions to wear the apparatus for at least six weeks longer.

In September I was gratified to learn that the operation was entirely successful, and that the arm was as strong and useful as before her injury.

The two points in the case which I consider of special interest were—

First—The use of the kangaroo-tail tendon, instead of silver or iron wire.

Second—The introduction of the buried row of cat-gut sutures uniting the muscle, and, I think, preventing the infiltration of the pus to and around the bone.

SELECTED ARTICLES.

SOME NASAL REFLEXES ILLUSTRATED BY A VERY TYPICAL CASE.

BY B. A. POPE, M. D., DALLAS, TEXAS.

The importance of the nasal reflexes has only been very recently appreciated by specialists, and therefore a case strikingly illustrating some of them cannot be without interest.

Mr. C., 39 years of age, of nervous temperament, but, with the exception of a rather delicate stomach, healthy and energetic, consulted me about what seemed, before he was thoroughly examined, a very serious condition of health. He was suffering from a supra orbital neuralgia of the left side, which had gradually grown worse. At first he had only occasional attacks, but they now return every day upon leaving his bed, disappearing at night time. The left side of the root of the nose and the neighboring upper part of the rim of the orbit were quite sore to the touch. The neuralgia had lasted for about a year, first appearing on the right side, but had lately located on the left side. One of the most striking features of the case, was his inability to concentrate his mind upon his professional business, which added moral to physical depression. There were also insomnia and loss of appetite, and other dyspeptic symptoms. His face was pale, and had a pinched and peculiarly vacuous expression.

The patient complained also of some nasal symptoms, which led, upon examination of the nasal cavities, to the discovery of the cause of the trouble, and his comparatively easy cure. For some time he had symptoms of nasal catarrh, which, however, had not received special attention. Upon examination the right nostril presented nothing but the usual picture of a chronic hypertrophic rhinitis. The left nostril, however, showed great hypertrophy of the lower turbinated bone, into the anterior

and middle portions of which a spinous process from the septum, running backwards, downwards and outwards, was impacted. The hypertrophied surface was extremely sensitive to the touch, even to the application of a probe point covered with cotton. So great was the sensibility of the inner surface of the turbinated bone, that when touched without the use of cocaine with any freedom, the examination would have to be suspended in order to avoid causing syncope.

When the patient was told that all his trouble was caused by a simple treatment of the nostril, the expression of incredulity on his pinched and almost expressionless features was a study.

The treatment consisted of the use astringents in form of spray and the application of pure chromic acid to the hypertrophied parts. The cure was completed in about one month. The neuralgia had almost entirely disappeared after two weeks' treatment, and was quite bearable in two or three days.

Of course such extreme examples of nasal reflexes will, as a rule, only present themselves in cases whose nerve-centres respond with great ease to peripheral irritation.

The inflammatory and mechanical irritation of the sensitive area of the inner surface of the inferior turbinated bones, sufficiently accounts for the phenomena presented by this case.

Especially to be noted is the peculiar form of neuralgia, appearing in the morning and disappearing at night, with soreness to pressure at the seat of pain; and the peculiar mental condition, in which the patient became totally unfitted for any continued mental effort.—*Southern Clinic.*

LOCAL DEPLETION IN PELVIC DISEASE.

BY HOWARD A. KELLY, M. D., PHILADELPHIA.

While local depletion alone is rarely of value in pelvic disease, it is a powerful adjuvant. Its action resembles that of the cotton tampon. Chronic or recurrent pelvic congestions improve under its use. The neurotic symptoms associated with a puffy, blue, plethoric cervix, markedly improve under judicious local depletion, combined with glycerole packs and tamponing. It is equally serviceable and speedy in cervix lacerations with eversion and lip infiltration. Many cases of this type recover perfectly when thus treated, and remain well if the uterus be prevented from sagging, by giving proper support to a torn or relaxed outlet. Except in the latter condition, when associated with lacerations, depletion is not often called for in spare or anæmic patients. The procedure, to be of value, must be thoroughly carried out. I am in the habit of drawing from six drachms to an ounce and a half of blood every five days, or once a week, following the depletion immediately by a glycerole or boracic acid pack, which is often retained until the next depletion. The cervix on both vaginal and uterine surfaces has been depleted, as well as the vault of the vagina. The last does not offer any special advantage over the cervix. Serious difficulties have occasionally arisen from too deep penetration of the scarifier, which may wound an artery of large caliber, and give rise to alarming hemorrhage. Difficulties also arise in the use of the spear-pointed instrument. This often occasions great pain to the patient, obliging the operator to desist, or to make but few punctures. A serious objection to the straight instrument is that depletion can only be practiced with safety and satisfaction upon the prominent and rounded extremity of the cervix.

My tenaculum is made like an ordinary tenaculum, with a blade in place

of a hook. This blade is placed at an angle slightly obtuse to the handle, and about the same length as the point on the ordinary rectangular uterine tenaculum. In using it the cervix should be fixed by a tenaculum in the uterine canal, when the small, short blade of the instrument can be plunged rapidly in a number of places into the vaginal surface of the cervix anteriorly and laterally, and even within the cervical canal. It is sometimes used to open a very small external os. The shortness of the blade and its being at an angle to the shaft, prevents a deep, dangerous penetration. If the cutting edge be kept sharp, and used rapidly, it occasions, as a rule, but little pain to the patient. This tenaculum is made entirely of metal, $7\frac{1}{2}$ inches in length, tapering gracefully from handle to the blade, which is $\frac{3}{8}$ of an inch long, $\frac{1}{8}$ of an inch broad at its base, $\frac{1}{16}$ of an inch wide on its back.

In the discussion, Dr. Da Costa thought if from one to four or more ounces of blood were removed, better results would be obtained. A woman who, when placed on the table, was suffering severe pain, and had an angry-looking uterus, would be rapidly relieved and the uterus would pale down. He used a straight bistoury to puncture the neck all over, and inside as well. Even a cut artery was of small matter. The trouble usually was that the bleeding stopped too soon. If he removed the speculum the bleeding almost always stopped, but the speculum was always replaced to make sure that this was stopped.

Dr. William Goodell remarked that in most cases simple exposure of the cervix to the air by the speculum caused it to become pale, although he granted that the effect was caused by the loss of blood. He used to bleed very frequently, and occasionally did so, but

not so often as formerly, because he believed the importance of uterine congestion was overrated. While hemorrhage was not usually to be feared, yet one patient had bled so furiously after she reached home that she had to send for a physician to check it. On one occasion, while plunging a Battles spear, he struck a vessel of such size as to throw a stream directly out of the speculum. But ordinarily the difficulty was to secure enough blood. When the punctures bleed too much, he touches each one with a pointed stick of lunar caustic, which never failed to stop the hemorrhage.

Dr. Parish had practiced Dr. Kelly's procedure whenever the uterus was congested, whether cervix laceration

existed or not, with excellent results. In many cases perfect union of the denuded surfaces resulted, but the pain and distress continued, and dysmenorrhœa increased. When the laceration was not deep, depletion, conjoined with other methods, was substituted for trachelarraphy. Cervix depletion gave excellent results in endometritis. Sterility of a decade's standing had been practically cured by it.

Dr. Kelly thought that the loss of an ounce and a half of blood every few days was sufficient. In depleting, he put the patient on the back, with Goodell's speculum in place, which conducted the blood into a wide-mouthed vessel of graduated capacity.—*Med. Standard.*

TREATMENT OF WHOOPING COUGH BY PROXIDE OF HYDROGEN H₂O₂.

BY DR. J. MOUNT BLEYER, NEW YORK CITY.

If the number of medicinal agents at our command in the treatment of any malady is an evidence how little impression we have hitherto been able to make upon it, then whooping cough is certainly a case in point.

The most various remedies, both for internal and local use, have been advocated according as the object was to treat the disease itself or to combat one or more predominant symptoms, not to speak of those which were employed empirically without any scientific basis.

When the method of pulverizing fluid medicines was discovered, a variety of medicinal agents was employed, with the view which then obtained of combating the inflammatory disturbances of the respiratory mucous membranes—nitrate of silver (Rohn, Noll, Kretzschmar), alum (Siegle), tannin (Steffen), chloride of iron (Gerhart, Wedemon), or solvents and expectorants to promote the liquefaction and

discharge of the viscid masses of mucous, so rapidly and profusely secreted. Steam of warm water, carbonate of potassium and carbonate of soda (Niemeyer), common salt (Steffen), salt ammonia and alum (Wistfeldt), or mucilaginous and narcotic remedies for the relief or arrest of the convulsive paroxysms and the suffocative symptoms attending them, mucilaginous solutions of the extract of hyoscyamus (Tieber), tincture of opium with common salt (Steffen), bromide of potassium (Helmke, Gebhard), etc. The results obtained by the inhalation of these and similar medicinal agents did not, however, much exceed those obtained by internal treatment, and in subsequent reports it has been claimed further that they diminished the intensity of the attacks, facilitated expectoration, and led to a more rapid recovery from the secondary catarrh, but the course of the malady was not cut short

by these agents, nor even abbreviated by their means.

I may mention here the popular methods of treatment, consisting in the inhalation of coal gas, which originated in Holland and has been largely practiced in France and the west of England, the parents of children suffering from whooping cough take them to the gas works.

Observations have been made by Keller in thirty-nine children during two years, by allowing the inhalations of gas, he could not ascertain that the inhalations exercised either a prophylactic or a specific influence over whooping cough.

It has been observed by Lächner that an aggravation of febrile symptoms resulted from this treatment.

This justifies me in warning the public against further treatment of this kind.

At the Fiftieth Congress of German scientific and medical men, held at Munich, Birch-Hirschfeld reports excellent results from the vapors of carbolic acid in the treatment of this malady. This method of using carbolic acid is based upon the assumption that whooping cough is to be reckoned among parasitic infective disorders, a theory which was formerly maintained by Letzerich, and which has been supported by the detection of countless masses of micrococci, of which I have repeatedly convinced myself.

The only important monograph on the etiology of whooping cough was written by a Russian physician, Ofanasiéff. This observer claims to have discovered the sole agent of whooping cough in the form of a bacteria.

The microscopic examination shows them in the shape of small rods, occurring singly or in pairs, or in chains. The length of the bacteria being, as stated by Ofanasiéff, 0.6 to 2.2 micro-millimetres.

Inoculations practiced upon animals have resulted in producing symptoms

resembling human whooping cough. These important observations have been confirmed by another Russian observer, Semptschenko, who emphasizes the fact that examination of the sputum reveals the bacilli.

During my service in the New York Eastern Dispensary, in the department for the diseases of the nose, throat and the chest, where the material was very abundant, I had great opportunity to make my experiments upon this disease. I have, in fact, run through the pharmacopœia, but with no satisfactory results.

While in Europe, a few years ago, I was introduced to a chemist, Mr. Ch. Marchand, "graduate of the Ecole Centrale des arts et Manufactures of Paris." This gentleman was much interested in the manufacture of peroxide of hydrogen, and asked me to make some experiments with this antiseptic agent in some cases; on my return I had studied up the subject.

After the discovery of peroxide of hydrogen by Thenard, in 1818, the manufacture of it was not a success on account of great chemical difficulties, until Mr. Ch. Marchand for many years experimented with it, in order that a pure article might be put upon the market. I have convinced myself of this, as all other preparations of which I have used are worthless and very often are more or less injurious.

Peroxide of hydrogen is known by French and German chemists as the most powerful, harmless antiseptic and anti-bacteriacide in existence. A scale of bacteriacide has been made up by Prof. Miquel, of France, showing that peroxide of hydrogen stands among a large list third and the mercury and silver salts series. From this high position which this oxygenated water occupies, it may be surmised that it is a sporicide of great power.

The careful comparative tests prove peroxide of hydrogen H_2O_2 , to be sixty times as powerful as carbolic acid,

twenty times as strong as salicylic acid and 40 per cent more potent than the solution of bi-chloride of mercury. This is extraordinary, and may seem incredible, but experiments place it beyond a doubt. As a disinfectant it is superior to chlorine gas or the fumes of sulphur.

The contact of peroxide of hydrogen with the offending matter produces its immediate decomposition into nascent oxygen or ozone and water, the result being the oxydation of pus and consequently its destruction.

I have been in the habit of making a laryngeal and nasal examination in every case presented at my clinic in order to ascertain the condition present. This result can be obtained by the means of my tongue retractor.

If nothing else is present, and the diagnosis of whooping cough is settled upon, I take a hard-rubber spray, while the tongue retractor and gage is in place, spray with the following peroxide of hydrogen solution the entire laryngeal space:

R Ch. Marchand's peroxide of hydrogen,
15 vol (chemically pure) 1 oz
Aqua 5 oz
Spray the larynx and pharynx.

After this has been accomplished I irrigate the entire nasal space, anterior and posterior, with:

R Ch. Marchand's peroxide of hydrogen,
15 vol 2 dr
Aqua 3 dr

I also prescribe for internal use Ch. Marchand's glycozone, which is a compound resulting from the action of ozone on C. P. glycerine.

I give a half-teaspoonful to a child of two years, diluted in milk or water, every three hours.

For home use the ozonizer apparatus or a hard rubber spray nasal douche either of rubber or glass (no metallic apparatus can be used) must be applied every four hours.

Other applications as they arise must be met by the physician.

I am entitled to say that my results, out of many cases, have proved to me a success.—*Omaha Clinic.*

A CROP OF BOILS.

BY WILLIAM M. CAPP, M. D., PHILADELPHIA.

Quite a number of articles have recently appeared in the medical journals concerning furuncle. Each writer had his favorite "sure cure," and one might feel that there was cause to reproach himself as blameworthy if he did not at once abort, cure, prevent recurrence and avoid a "crop of boils" in any case of the kind which should present itself. Lately an opportunity offered itself to me to try some of the remedies advised. A patient about seventeen years old came for treatment for an unmistakable boil upon the thigh—large, inflamed, swollen and painful. The general health was good and at first only local applications were resorted to.

Mindful of the theory that succeeding boils come from external inoculation from a previous one, the greatest cleanliness was observed, and boracic acid disinfection was used. A liberal application of a salve composed of salicylic acid rubbed up in simple cerate was made at bedtime, and though it caused smarting at first, afterward it was soothing, and a good night's sleep was obtained. In the morning there was a large accumulation of matter, which was removed without much pain; but the skin in many places around, where it had been covered by the salve, was blistered as thoroughly as if catharides had been used. The

hardness was all gone, there was relief from pain, and very soon there were the appearances of a healthy sore, which healed satisfactorily. But a few days later as many as nine other points of pain and induration were noticed, all within a radius of five inches from the site of the first boil. The same application, but with a smaller proportion of acid, and with cosmoline substituted for the cerate, was used. The boils all quickly suppurated, with very little pain. Most of them were superficial, two only were at all large, and none of them were as formidable as the original boil. They were thoroughly cleansed by a solution of bi-borate of soda and dressed with cosmoline of neutral reaction, having boracic acid rubbed into it in about the proportion of twenty grains to the ounce. Some cosmoline has an acid reaction, and hence is irritating, and for such applications is better avoided. This treatment proved soothing, at once allaying the itching and soreness, and a rapid healing followed, with no further irritation in that locality.

A few days later several inflamed pimples appeared on the face, and the general health appearing a little depressed, an iron tonic was administered and also sulphide of calcium, four times daily, in a dose of three-quarters of a grain, which was gradually increased to a grain and a half. One of the pimples becoming large and painful, another of the remedies recommended as infallible was tried upon it, viz.: Tannin made into a paste with tincture of arnica and gum acacia, painted thoroughly over and around the affected spot. It certainly was soothing, but otherwise worthless, unless, indeed, it may have hastened suppuration, for the next morning the boil discharged copiously.

By this time several angry lumps were developing, with much pain, on the cheeks and one on the chin. As there were still other treatments recommended as never failing to abort a

forming boil, it was thought advisable to try some of them. The chin was freely and frequently bathed with a solution of salicylic acid—the part kept moist with it. It was soothing, but the boil suppurated at three points, with probably less swelling and pain, however, than otherwise might have been expected. A strong solution of boracic acid in alcohol, which was much praised by a recent writer, was tried upon another forming boil, with quite similar effect.

The two upon the check, which threatened to be very troublesome, were treated according to the recommendation of still another writer. They were painted freely for three days with the semi-fluid extract of belladonna, at the end of which time they had nearly disappeared without suppuration and were practically well. The application from the first was soothing and the result satisfactory.

In addition to the treatment narrated, the patient took, at the solicitation of friends as a vaunted household remedy for boils, some porter—a wineglassful four times daily for three or four days. After about four weeks from the appearance of the first boil, there were no further manifestations and the malady seemed passed.

It is in order now to decide if any of the remedies had any effect whatever upon the disease except to mitigate the pain at the time. The writer feels that in treating another case of furuncle, unless meanwhile a better course should commend itself, he would rely upon calcium sulphide internally and belladonna externally, and would hope for like good results.

Since writing as above, an acquaintance relates that quite recently in treating a case essentially similar, the medication used was the fluid extract of burdock internally, with equally good results. This remedy then, in his estimation, is also to be added to the list of "sure cures."—*Med. and Surg. Rep.*

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EDITORIAL.

AN IMPORTANT COMMITTEE MEETING.

The committee appointed at the last meeting of the Illinois State Medical Society, to revise the constitution and by-laws of that organization, will meet at LaSalle, Ill., Dec. 4th. The work imposed upon this committee is among the most important ever given to any committee by this society, for the future prosperity and usefulness of the society will depend, to a large extent, upon the successful elucidation of the problems placed in the hands of this committee. The society has been losing ground for a number of years

past, both in attendance and the interest manifested in it by the profession throughout the state. How to restore it to its former position and bring within its influence and membership a respectable proportion of the regular practitioners of the state, is one of the problems given to this committee for solution.

We hope the work of this committee will be crowned with entire success, and that the future of our state society will be even more successful than it has been in the past.

A NEW EDITOR.

The venerable Dr. N. S. Davis has at last insisted upon his resignation as editor of the *Journal of the American Medical Association* being accepted, and at a special meeting of the trustees of the journal, Dr. John B. Hamilton,

Surgeon General of the Marine Hospital Service, was chosen as his successor. Dr. Hamilton has since resigned his position under the government, and will assume charge of the *Journal* January 1, 1889.

DR. D. HAYES AGNEW has resigned the professorship of surgery in the Uni-

versity of Pennsylvania. Various names are mentioned as his probable successor,

prominent among whom is that of Dr. N. Senn, of Milwaukee.

CHEMICAL analyses of proprietary articles will, for some time to come, be considered possibly unreliable. Dr. W. H. Morse, an alleged chemical expert of Westfield, N. J., has been arrested for fraudulent use of the mails. He confessed, and pleaded ignorance of the law. He never had a laboratory and never made an analysis.

DR. H. B. SANDS, a prominent surgeon of New York city, died suddenly of heart failure November 18. He was associated in the cases of General Grant and Roscoe Conkling.

FOR the benefit of such as may envy the British doctors, and some do to our certain knowledge, we quote the following from the *London Lancet*:

" My practice has been to ring the visitor's bell gently, though even that when calling to see a servant has seemed to me to savor of impropriety. But whatever course the young doctor adopts, let him of all things beware of using the knocker. That would imply familiarity with the family, the very suspicion of which it behooves the circumspect practitioner to avoid. So

long as he confines his manipulations to the bell-pull he is safe. The next problem which confronts him is what to do with his hat. Following the custom of other men who have business in the house, he should by rights leave it in the hall, not on the floor, but on the hall table. This course, however, may involve him in serious danger; if there are children about the house, they may be counted upon to play with it, perhaps march into the drawing-room with it on their heads. A complication, I need hardly say, as being evidence of undue familiarity would be of the gravest import. My own plan has been to take my hat with me, and only to relinquish it when the clinical investigation of a case rendered such a course absolutely necessary. Familiarity is impossible so long as the hand keeps touch of the beaver. It is an almost impregnable rampart, and would take the sting out of anything a tale-bearing domestic may say hereafter. The ethics and etiquette of hand-shaking form a difficult subject. As a rule, I agree with the *Lancet* that it is best to avoid it. If a lady of title offers two jeweled fingers, the young practitioner would be at once foolish and rude to decline to take them, but the touch should be cold and momentary. With the wives of commoners it will be best, if it can be done without obvious rudeness, to bow formally, instead of offering to shake hands, both on entering and leaving."—*Med. Standard*.

BOOK NOTICES.

THE EAR AND ITS DISEASES. Being practical contributions to the study of Otology. By SAMUEL SEXTON, M. D., Aural Surgeon to the New York Eye and Ear Infirmary, Fellow of the American Otological Society, Fellow of the New York Academy of Medicine, Member of the Medical Society of the

County of New York, and of the Practitioners' Society of New York. Edited by CHRISTOPHER J. COLLES, M. D. Octavo, 473 pages. Numerous illustrations. Extra muslin, \$4.00. New York: William Wood & Company.

The author disclaims an attempt to cover the whole ground of otology, but

from a glance at the subjects discussed, the ordinary reader will wonder what has been left out. The following are some of the subjects introduced, and it will be noticed that they are of great practical importance: Catarrh of the upper air tract; oral irritation, especially dentition and diseased teeth; sea bathing; wounds and injuries of the ear occurring in warfare and civil life; rupture of the drum-head, from boxing the ears, and its medico-legal aspect; concussion from the blast of great guns and explosives; anomalies of audition; noises in the ears and their connection with insane hallucinations and delusions; the classification and education of school children with defective hearing; the effect of high atmospheric pressure on the ears; the subject of pension claims of soldiers, sailors and marines on account of disability from deafness.

The latter topic will make it of especial value to members of pension boards, while the general practitioner will find all of it of interest and value. The book is gotten up in the publishers' best style, and the illustrations are plentiful and satisfactory.

A TEXT-BOOK OF HUMAN PHYSIOLOGY. By AUSTIN FLINT, M. D., L.L. D., Professor of Physiology and Physiological Anatomy in the Bellevue Hospital Medical College, New York, etc., etc., etc., with 316 figures in the text and two plates. Fourth edition entirely re-written. Cloth, 8 vo., pp. 872. New York, D. Appleton & Company, 1888.

Eight years having elapsed since the third edition was published, and the advances made during that time in

physiology having been many and very important, the present volume is almost a new work, and is by common consent the best among the many textbooks on physiology. The old system of weights and measures has been retained, their metric equivalents being given in parenthesis. The new chemical nomenclature has been adopted throughout. Many of the old illustrations have been omitted, and new ones made to take their place. The work is issued in elegant form by the publishers, and no expense has been spared to make it handsome and complete.

HAND-BOOK OF HISTORICAL AND GEOGRAPHICAL PHTHISIOLOGY. With special reference to the distribution of consumption in the United States. By GEORGE A. EVANS, M. D., 12 mo., pp. 295. New York: D. Appleton & Company, 1888.

The historical sketch introducing the subject is one of great interest and worth. It gives in short space information that could only be gained by prolonged research and from sources not available except to the profession in large cities.

The chapters on the geographical distribution of consumption in the United States are taken largely from census reports, and is original work. The chapters on etiology and conclusions are of great value, containing, as they do, the latest and best opinions of all scientific investigators of this dread disease. There is no subject that should command from the general practitioner more careful study, and this little volume will certainly be of great assistance in his labors.

PERISCOPE.

REMARKS ON CASES PRESENTING CÆDEMA OF THE LOWER LIMBS.—The condition known as cœdema of the lower extremities due to disease of the kidneys, with its attendant anaemia, is well illustrated by two cases I shall bring before you this morning. Both are female patients. The first is a woman, aged 40 years, a housekeeper by occupation; she is married and has had seven children. She tells us that with each of her later pregnancies she has suffered with marked cœdema of the lower limbs, which, however, completely disappeared after delivery. Her youngest living child is two years old; but a miscarriage took place five months ago, and the cœdema which then existed has since become persistent. She says that her feet and ankles are always more swollen at night, after a hard day's work, than in the morning when she rises. There is no albumen in her urine at present. With regard to cœdema of the limbs occurring during pregnancy, an interesting pathological question arises as to its cause. During pregnancy there is no hypertrophy of the left ventricle, which temporarily increased arterial tension. This, of course, tends to produce an interstitial nephritis; therefore, in all cases of cœdema, it is important to examine the urine. Not that we attach much importance to the proportion of albumen, but the specific gravity taken in conjunction with the quantity of urine excreted is of great consequence. In other cases of cœdema in pregnancy the case is a mechanical one, and is due to pressure of the gravid uterus on the large veins of the abdomen, the venous circulation being impeded. This condition ends with parturition.

You will observe, gentlemen, that this patient has no cœdema of the face or eyelids, and that there is not the "pasty" appearance characteristic of one suffering with kidney disease. The

pulse tension is not increased. Examination of the heart shows that its action is a little rapid, probably from the excitement of attending the crowded clinic. On listening with the stethoscope over the pulmonary valve we can discover a soft anaemic murmur with the first sound; but there is no evidence of valvular disease at the aortic or mitral orifices; therefore there is nothing in the clinical history to warrant our making a diagnosis of actual kidney disease, or organic heart affection. We may regard the cœdema as due to simple anaemia resulting from poverty of the blood, and shall prescribe some tonic preparation of iron—the bitter wine, for example—in order to increase the number and improve the color of the red blood corpuscles.

The next case, gentlemen, is also one of cœdema of the lower limbs, existing in a colored woman, aged 42; but arising from a different cause. The cœdema is really due to a combination of cardiac and renal diseases. On examination of the urine, we find albumen and casts in abundance. Examination of the eyes shows the existence of albumenuric retinitis, together with atrophic changes in the choroid; auscultation over the cardiac region tells us that a mitral systolic rumor is present at the apex.

We shall place this patient on Basham's mixture, half an ounce four or five times a day; and for the purpose of withdrawing some of the serum from the areolar tissue, we will order a hydragogue cathartic pill containing one-third grain gamboge, one-fourth grain elaterium, with one-third grain extract of opium, to be taken at bed-time.—*Woodbury, in Med. Times.*

PHARYNGITIS.—Waugh says that this generally begins with a burning or itching over a small spot, frequently starting at the uvula; whence it spreads

upward, backward and downward. It can often be aborted by touching the affected spot with a solution of nitrate of silver five grains to one ounce. He has tried cocaine a number of times, but finds it unsatisfactory; for the trouble is thus allayed only temporarily, coming back perhaps with increased severity. If the disease has passed the abortive stage, let the patient hold ice in the mouth, apply cold or hot compresses over the throat, and give this preparation—his "diphtheria mixture."

R. Potassæ chloratis pulvris 1 drachm
Acidi hydrochloric U. S. P. ½ drachm
Misce et adde
Tincturae ferri chloridi 2 drachms
Aquaæ q. s. ad. 4 ounces
Sig. Teaspoonful every two hours, with no water.

This is almost strong enough to make one choke, but its effect in jugulating an acute pharyngitis is remarkable.—*Med. Times.*

WAX IN THE EAR.—Atkinson prescribed the following solution for a child's ear filled with wax:

R. Liquoris sodaæ chlorinatae 5 drops
Zinci sulphatis 2 grains
Aquaæ rose 1 fl ounces
M.

Sig. Drop in, two times a day, after washing the canal with warm salt water.

—*Med. Times.*

GASTRIC CATARRH. — Waugh says it is singular that catarrh is so often called dyspepsia, and that patients are thus treated wrongly numberless times. Dyspepsia is, compared with catarrh, a rare disease. Here is a combination of medicaments which, he says, is of great service in most catarrhs:

R. Sodaæ carbonatis 2 drachms
Vini ipecacuanhæ
Extracti rhei fluidi aa. 2 fl drachms
Syrupi rhei q. s. ad. 2 fl ounces

Sig. 2 drachms in a glass of hot water an hour before meals.

The soda dissolves the coating of mucus in the stomach. Ipecac in small doses increases the gastric juice. Rhubarb carries off by the bowels the morbid products, and in addition in-

creases the flow of the intestinal juices. The prescription is not to be continued too long, lest the patient becomes debilitated.—*Med. Times.*

CONJUNCTIVITIS PHLYCTENULOSA.—This lasts, on an average, about eight to ten days. Prognosis, if treated properly, is favorable. Treat with cold compresses if the cornea is not involved, and use on the eye either calomel or unguentum hydrargyri oxidii flavi. If calomel is used, do not give it to the patient, but dust in a little, carefully roll the lid over the ball for a few moments, and then remove the calomel with a soft cloth from the eye. People will generally allow the calomel to remain on the eyes of a child affected, and thus more irritation is set up than you care to have. Cases in scrofulous children are obstinate. I know of nothing else so good to tone up these children as salt baths. Make a strong solution of rock salt—as it is cheap—in a tub of water. Wring towels out of this water and allow them to dry. After removing the child from the water have it simply wrapped with these towels. Considerable salt is thus left on the body, where it is dissolved by the perspiration and still farther absorbed. This bath should be given two or three times a week.—*Keyser, in Med. Times.*

LENTIGO.—Freckles is a disease, and in the case of a girl, often a highly disfiguring one, says Shoemaker. Solutions of boric acid and corrosive sublimate are good here. Still better is it to touch freckles with carbolic acid. This destroys the epidermis, and of course the pigment spot with it; but the process is painful. Best of all, perhaps, is galvanism, ten to twenty cells. Put the anode on the back of the neck and pass the cathode over the face.—*Med. Times.*

COUGH MIXTURE.—To a boy of 13, Atkinson gave this cough mixture:

R. Ammonii muriatis 2 drachms
 Syrupi senegæ $\frac{1}{2}$ ounce
 Misturæ glychrrhizæ comp 4 ounces
 Sig. 1 drachm, every three hours.

—*Med. Times.*

OÖPHORECTOMY. — Within the last two weeks Montgomery has performed oöphorectomy twice at his clinic. In each case the ovaries had undergone cystic degeneration. Both patients recovered most satisfactorily, the temperature in neither case rising above 101° , going thus far to prove that these operations, with proper care, can be performed with impunity before a large audience.—*Med. Times.*

EYE OPERATIONS. — Keyser performed four operations at his eye clinic, November 2. One was the removal of a meibomian cyst through the external aspect of the upper lid, because the cyst was on the tarsil cartilage. The second was an operation for strabismus. He then enucleated, without ether, an eye for traumatic injury. And the last was the evisceration for anterior staphyloma of a young child's eye. He did not like to operate in this case, for by the time the child grows up, the lids will be atrophied too much to give a good appearance with a glass eye; but the staphyloma was growing so fast he had no choice.—*Med. Times.*

HERPEZ ZOSTER. — For a case of unilateral "shingles" of the right intercostal region, Shoemaker gave this treatment:

R. Ferri pyrophosphatis 30 grains
 Acidi arseniosi 1 grain
 Quininæ sulphatis 30 grains
 Ft. pilulæ in no. xxx.
 Sig. Take one, ter in die.

Apply the following ointment:

R. Unguenti hydrargyri oleatis,
 Unguenti aquæ roseæ 1 ounce

—*Med. Times.*

TENOTOMY. — Apropos of a case of tenotomy, Pancoast said he proposed

inserting the tenotome over the tendon instead of under it. Upon making the tendon tense it cuts itself on the knife.—*Med. Times.*

LEAD-POISONING. — Da Costa showed two interesting cases of lead-poisoning, occurring in a mother and daughter. In both cases the blue line on the gums was well marked. The symptoms were headache, pain in the back and constipation; but there was no evidence to show that the poison had affected the nervous system. The history of the cases was that the patients had resided during the summer at Atlantic City, in a new house, with new lead pipes. They noticed the drinking water which passed through these pipes was brackish, and Da Costa thought it had a solvent action on the lead, the poison being in this way introduced into the system as a soluble salt. His treatment consisted in giving iodide of potassium, ten grains three times each day, to the mother, with a proportionate dose for the daughter, the bowels to be freely moved by sulphate of magnesia.—*Med. Times.*

GASTRIC ULCER. — Da Costa illustrated the differential diagnosis between gastric ulcer and hysterical vomiting in an anaemic-looking female, aged thirty, who gave a history of obstinate vomiting for some years. Twelve weeks previously she inhaled the fumes from phosphorus paste, after which she was affected with complete aphonia, and the vomiting from that time became so severe that nothing but ice-cream would stay on her stomach. The patient said she had lost forty pounds since that date, and admitted having vomited a mouthful of dark-colored clotted blood on two occasions. She complained of pain and distress after swallowing food — the pain being more marked if any any irritating substance was introduced into the stomach. The pain was de-

scribed as of a "boring" character, referred to the dorsal region.

Examination revealed distinct pain and tenderness in the epigastrium on deep pressure. In reviewing the history of the case, Da Costa said: "The only evidences in favor of the case being one of hysterical vomiting, are the fact that the patient is a female of nervous temperament, and that a disturbance of the nervous system took place when she inhaled the fumes of phosphorus paste. But if we are to regard the case as one of gastric ulcer, which I am inclined to think it is, we have the fact that this obstinate vomiting has taken place for some years, that the patient is undoubtedly anaemic, that there is a distinct history of her having vomited blood on two occasions, that there is pain in the stomach after eating, referred to the dorsal region, and most important of all, gentlemen, that there is localized pain on deep pressure over the epigastrium.

"With regard to treatment, I shall prescribe a milk diet. Sometimes people who can't take milk, even when limewater is added, will often retain it if a few drops of aromatic spirits of ammonia be given with each tablespoonful of milk. Then I think nutritive enemata, with Reed & Carnick's peptonoids, will be of service in this case.

"The medicinal treatment will consist of $\frac{1}{2}$ grain of cocaine in pill four times a day, with a suppository of 10 grains of chloral morning and evening. The cocaine exercises a healing effect as well as relieving the pain in these cases.

"I have left to the last what I consider most important. *Keep the patient in bed.* This I always insist on. If there was not so much irritability of the stomach, I would be disposed to give iron, silver or arsenic in small doses."—*Med. Times.*

SIGHING.—At the conclusion of the clinic, a very extraordinary case of sighing was shown, occurring in a well-nourished man, aged twenty-eight. The sighing was quite involuntary, and occurred at intervals of about half a minute. The patient gave a history of mental worry, with depression, for some months. He had marked symptoms of dyspepsia and was constipated. Physical examination showed his heart's action to be rapid, with accentuation of second sound; but no murmur was heard. The urine was acid, amber in color, and sp. gravity 1020. Da Costa called attention to the fact that sighing is a prominent feature of all heart affections, except those due to fatty disease. He considered the case of hysterical origin, and ordered $\frac{1}{10}$ grain of hydrobromate of hyoscine every four hours, with three-minim doses of Fowler's solution, three times a day, after meals.—*Med. Times.*

TREPHINING FOR EPILEPSY.—An interesting case of trephining for epilepsy was shown by Nancrede. The patient, a man aged twenty-seven, gave a history of a fall nineteen years ago, which, on recovery, was followed by attacks of an epileptiform character, occurring as often as three or four times every day. The attacks were unilateral, being confined to the right side, and invariably commenced in the thumb, which was flexed on the palm, the fingers being bent into a typical "claw hand." The diagnosis was made of a lesion affecting the thumb-center in the left side of the cortex. Three weeks ago the patient was trephined over the left parietal region, an incision being made into the scalp of a horse-shoe shape, the convexity being directed backwards and to the right. A button of bone was removed, together with the cicatricial tissue from the old injury, which had involved the

dura mater and pia mater to such an extent as to cause pressure on the brain, the result being that the peculiar epileptiform fits were produced. The diagnosis was verified by electrical stimulation of the thumb centers after the affected area had been removed, when all the phenomena of the attacks were produced in regular order with great fidelity.

On the morning of the operation the patient had eleven attacks, but there have been none since.—*Med. Times.*

UTERINE POLYPUS.—Parvin recently removed a polypus from the os uteri, and said that in his opinion the cervical canal was by far the most frequent seat of those tumors. He also performed plastic operations for an old laceration of the perineum, and of the cervix.—*Med. Times.*

ORBITAL CANCER.—Roberts, at a recent clinic, operated on a case of malignant tumor involving the right side of the face. The patient was a woman, and stated that the disease commenced in the right lower eye-lid about twelve months previously. On examination, it was found to have involved the eye, the orbital plate of the frontal bone, the entire malar bone and the adjacent portion of the superior maxillary bone of the right side. All these structures were removed after a tedious operation; but meningitis set in, which ultimately proved fatal three days afterwards.—*Med. Times.*

VICARIOUS HÆMOPTYSIS.—Baer exhibited at his clinic a patient who gave the following history: She was twenty-nine years; the menstrual flux appeared for the first time at the age of fifteen, when she began to spit blood, and has done so ever since. The hæmoptysis is of almost daily occurrence, but is invariably increased at the time of menstruation. Her family history was good, and physical examina-

tion of the chest revealed nothing abnormal, there being no cough or any evidence of pulmonary trouble.

Eight months previously she began to complain of pain in the lumbar region of a bearing-down character. On visiting the clinic a few weeks ago, a vaginal examination was made, which showed the uterus to be slightly enlarged, with some prolapse and elongation of the cervix. A pessary was inserted to replace the womb, and valerianate of quinine ordered. When she visited the clinic on the 29th October, the condition of the womb was much improved, and the bearing-down pains had disappeared. She was ordered hamamelis. Baer considers the case one of vicarious haemoptysis.

RESECTION OF LEFT ANKLE JOINT FOR COMPOUND FRACTURE.—Gross operated on a bad case of compound fracture involving the left ankle joint. The injury had occurred five weeks previously, and was attended with extensive laceration of the soft parts, the vessels, however, escaping.

Conservative treatment, with elaborate antiseptic precautions, was first tried, but without success, as it was found that necrosis of the malleoli, the articular surfaces of the astragalus and tibia had set in.

The patient having been etherized, an Esmarch's bandage was applied, in the hope of having a bloodless operation; but the lesion was so extensive that it was abandoned, it being feared that gangrene of the soft parts would ensue.

A crescentic incision was made on each side of the ankle joint, and a careful dissection of the structures was performed until the bones were exposed. The joint was disarticulated, when it was discovered that the necrosis had involved almost the entire astragalus and the articular end of the tibia. These, with both malleoli, were removed after a tedious operation ac-

accompanied with much hemorrhage. A drainage tube was inserted, and the wounds closed antiseptically. Gross considered the prognosis unfavorable, and thought amputation would ultimately have to be performed.

GASTRIC CATARRH.—The first case I shall bring before you to-day is manifestly one of chronic gastric catarrh, but from the history the patient gives us there is possibly cirrhosis of the liver. Now, experience teaches us that cirrhosis of the liver invariably commences with morning sickness, with marked enlargement of the gland, due to the fact that the interstitial tissue is increased with chronic congestion of the capsule of Glisson, so that you can readily understand that percussion over the hepatic region in these cases is of the greatest importance in enabling us to arrive at a diagnosis.

Here we have a patient, aged thirty-five, who admits having consumed a large quantity of beer for some years. He tells us that he has lost forty pounds in weight during the past twelve months, that he has morning sickness and chronic diarrhoea. On examination we find that there is no tenderness on pressure over the region of his liver; that there is no abnormal dullness over that organ; that the two sides of the abdomen are equally yielding; there is no evidence of piles or of portal obstruction, so that we may safely say he has no cirrhosis of his liver.

Gentlemen, cirrhosis of the liver may arise from the abuse of any form of alcoholic stimulant, but is the most usual accompaniment of dram drinking—that is, drinking undiluted whisky on an empty stomach.

We find on examination that this man's heart is very rapid, but there is no murmur; his pulse is 144, his respiration 45, that his diaphragm is acting violently, and that there is marked tremor of the muscles. With regard

to the loss of forty pounds in weight during the past twelve months, it is clear that this man, from his mode of living, was puffed up with useless flesh, which in these cases is invariably lost with great rapidity. I have no doubt but that this is a case of chronic gastric catarrh, the result of alcoholic stimulants, and that the condition of the heart, respiration and pulse are explained by the constant irritation which has been set up in the mucous membrane of the stomach.

But there is a complication present which has an important influence on our prognosis. Two weeks ago we are told that he vomited a large quantity of blood. On examining the lungs I find there is nothing abnormal in front, but when I percuss the posterior aspect of the right lung I find marked dullness, with scattered rales and increased vocal resonance on auscultation. I do not know if there has been any discovery of tubercle bacilli in the sputum.

This pulmonary complication can hardly affect our primary treatment of the case. We must first put the stomach in order, as at present it can retain nothing. I shall order absolute rest, and nothing but milk diet, and nitrate of silver in pill, with a small quantity of opium. The pulmonary trouble I shall treat with sedative inhalations. When the stomach and bowels are in a better condition, I would be disposed to give him cod-liver oil with lactophosphate of lime. I expect that when the gastric irritability subsides, the general condition of the patient will also improve.—*Med. Times.*

PARACENTESIS THORACIS.—Bruen tapped the right pleural cavity to remove an effusion resulting from a former pleurisy. The existence of dullness, changeable with the position of the patient, having been made out, an aspirating needle was thrust into the intercostal space in the mid-axillary

line. About half a pint of amber-coloured fluid was withdrawn, and the aperture closed with adhesive plaster. Bruen impressed on his hearers the necessity of passing the needle horizontally to a depth of three inches, so as to make sure of getting it through the skin, the intercostal muscles and the parietal layer of the pleura. He advocated the use of a small needle, and the withdrawal of a small quantity of the fluid at each operation, so as to avoid too sudden expansion and consequent laceration of the lung tissue.—*Med. Times.*

SPINAL TUMOR.—J. William White, in exhibiting the patient on whom he had operated a week previously for spinal tumor, said: “How far the patient will be benefitted by the operation I am unable to say, but he is quite over any danger that might have resulted, and, therefore, I shall not bring him before you again for some time, as the case has lost its interest as one of acute surgery.”—*Med. Times.*

SYPHILITIC ERYTHEMA.—White exhibited two patients, middle-aged males, who were covered with secondary syphilitic eruption, which he classed as superficial erythema. He said that it was important to remember that in those cases in which eruptions that are classed amongst the later phenomena occur early, there is usually danger of profound and deep-seated trouble, and the treatment should call not only for the exhibition of anti-syphilitic remedies, but the general health of the patient must be supported by tonics and generous diet.—*Med. Times.*

GONORRHEAL RHEUMATISM.—White brought before the class a female patient for the purpose of showing the difference between ordinary rheumatism and that due to gonorrhoeal infection. He said:

Gentlemen, in this case it is interest-

ing to know whether we are dealing with a case of acute rheumatism of idiopathic origin or one due to joint infection from gonorrhoea. There is a history of gonorrhoea three weeks ago, followed by enlargement of the right wrist-joint, which is painful and tender on pressure. There has been no rise in temperature, no acid, strong smelling perspiration and no evidence of cardiac affection. There is no personal or family history of previous rheumatism. If a patient comes to you and says: “My knee or ankle or wrist joints are swollen,” and you find there is but slight elevation of temperature, that the urine is but slightly altered, and that there is no acid perspiration, you may be safe in dealing with it as a case of gonorrhoeal rheumatism, especially if there is a history of previous gonorrhoea. In rare cases, however, gonorrhoea and acute rheumatism may co-exist, which would render the diagnosis difficult. I have no hesitation in pronouncing this case one of gonorrhoeal rheumatism, which is about the most troublesome joint affection you can be called upon to treat. That it is a mild form of pyaemia is the theory now most accepted. The pathology of the disease seems to be that it is due to the absorption of pus into the system from the uretha or vagina. It is much more frequent in the male than in the female—the proportion being about 10 to 1; its prevalence in the former being explained (if we accept the pyaemic theory) by the fact that the long uretha presents a greater surface for absorption of the purulent secretion.

“With regard to treatment, it may be laid down as a general rule that the iodides and salicylates are of very little use. The plan I have adopted is to give large doses of sulphate of quinine—say five grains, six times a day during the acute stage. This I follow with small doses of the mercurials— $\frac{1}{4}$ grain of the bichloride or $\frac{1}{2}$ of a grain of the proto-iodide of mercury. The affected

joint is placed in a fixed splint and wrapped in cotton wool. I have had the most excellent results from this line of treatment in a very large number of cases."—*Med. Times*.

FALSE ANCHYLOYSIS.—Hunt showed a man, aged thirty-five, an iron moulder, who twelve weeks previously had been operated on in the Pennsylvania Hospital for a large abscess of the left hand. The middle finger had been removed at the metacarpo-phalangeal joint, and the burrowing of the pus had caused matting of all the tendons with inability to flex the fingers. As the patient was unwilling to have forcible flexion made under either, Hunt advised him to try steeping the hand in warm soap suds, with passive motion, every day to accomplish the desired result.

CARBONIC ACID WATER AS A VEHICLE FOR CREOSOTE.—The taste and odor of creosote are so disagreeable to many patients that physicians have in some instances been deterred from prescribing it, especially in the large doses in which it has been advised by German writers. It is true, when given in capsules the taste and odor are not perceived; but this form of administration is objectionable when large doses are given, because the drug then reaches the stomach in a concentrated form. In the *Berliner klin. Wochenschrift*, August 6 and 13, 1888, Dr. J. Rosenthal advises the use of carbonic acid water containing cognac as a vehicle for the creosote. This combination, he says, is comparatively tasteless and obviates the disadvantages attending the administration of creasote in a concentrated form. The mixture is put up in bottles holding five and a half, ten and a half, and sixteen ounces. The smallest bottles contain from one and a half to three minims of creasote and seventy-five minims of cognac; the middle-sized bottles, six minims of creasote and two and a half fluid

drachms of cognac; while the largest contain nine minims of creasote and three and a half fluid drachms of cognac. During the first week the patient is directed to take one of the smallest bottles after dinner and supper each day; during the second week he should take a half bottle of the next stronger water after breakfast and dinner, but continue to take the weaker water after supper. The quantity of creasote which he takes may in this way be increased gradually until the maximum dose of twelve and a half minims a day is reached.—*Med. and Surg. Rep.*

A NEW USE FOR ETHER DURING ANAESTHESIA.—Very frequently during the early stages of the administration of an anaesthetic the patient "forgets to breathe" even before the ability to perceive peripheral irritation is lost. Even later in anaesthesia, when the breathing suddenly ceases, we are accustomed to use cold water externally and to slap the patient with wet towels.

Such measures are generally called for hurriedly, and it is not at all uncommon for an exasperating delay to occur before the water arrives. The ether is always at hand, however, and I have found that in a large number of instances, both in man and the lower animals, the free use of ether poured upon the belly causes so great a shock by the cold produced by its evaporation as to cause a very deep inspiration, which is often followed by the normal respiratory movements. This is, of course, a simple procedure, and one which has probably been used by others, but I have never seen it so employed.—*University Med. Magazine—Med. Age*.

COCAINE IN QUINSY.—*The British Medical Journal*, of May 19, 1888, contains an article by Dr. de Havilland Hall in the treatment of acute tonsilitis

by cocaine. He reports several cases in which the disease had been cut short by the free application to the fauces of a twenty per cent solution of cocaine, and believes that the drug acts by diminishing the sensibility so that deglutition can take place without pain, and also by diminishing the local congestion so that the inflammatory process is arrested. It would appear that cocaine is more active after the throat has been cleansed by a solution of bicarbonate of soda.—*Sacramento Med. Times.*

CLASS-ROOM NOTES—

Dr. Hearn ordered a patient affected with *tinea versicolor* to scrub the affected skin with the following mixture:

R. Saponis viridis,	2 ounces.
Acid carbolic,	2 drams.
Alcohol,	4 ounces.

After which apply:

R. Sodii sulphitis,	$\frac{1}{2}$ ounce.
Glycerni,	$\frac{1}{2}$ ounce.
Aquae, q. s. ad	8 ounces. M.

The *bag of waters* generally ruptures at the beginning of the second stage of labor; should it not do so it is advisable to rupture it, and this may be done generally by firm pressure of finger against it during uterine contraction; if this method does not succeed, a few notches may be cut in the finger nail, using it as a saw against the tense membranes. (Parvin.)

In the first stage of *hip disease* pain and swelling are absent and the patient does not complain; the second stage is the result of an injury, which may be slight and even unnoticeable, but an injury has been received in some form or other; the third and last stage is the destruction of the parts. Do not attempt to move the hip joint if it is stiff; if you do, you will do harm. (Dr. Allis.)

The prognosis of *fatty heart* is unfavorable for a cure, but if there is no strain upon the organ, it can be benefitted by treatment. Diet does not ma-

terially injure, but should be good and nourishing. Stimulus is the best treatment, given with meals in small quantities. Digitalis does not do very much good, but strychnine is valuable; also small doses of nitro-glycerine. (Da Costa.)

Prof. Bartholow recommends the iodides as among the best remedies for beginning *cirrhosis*, often adding arsenic to the prescription, whereby the efficiency of the iodide is increased:

R. Ammon iodidi,	1 ounce.
Liq. potas. arsenitis,	$\frac{1}{2}$ dram.
Tinct. colombae,	$\frac{1}{2}$ ounce.
Aquae,	$1\frac{1}{2}$ ounces.

Sig.—One teaspoonful three times a day, before meals.

When *carcinoma of cervix uteri* has reached such a stage that it is unavoidable to operate, Prof. Parvin advises the use of antiseptic injections, preferable a solution of permanganate of potassium, in the proportion of one dram of the salt to one pint of water, and used twice a day; for the hemorrhage use tampon and saturated solution of alum, and at same time cotton root or ergot internally; for the pain give opium, and enough to subdue it.

To relieve the paroxysm of *asthma*, there is no remedy equal to the hypodermic injection of morphine. In many cases iodide of potassium in full doses, fifteen or twenty grains every two or three hours, will arrest the paroxysm. In cases which persist for some days, the combined action of bromide and iodide of potassium, with the addition of one or two drop doses of Fowler's solution, is commended. The inhalation of pyridine, iodide of ethyl and fumes of burning narcotics are used to the exclusion of all other remedies by some asthmatics. In the treatment of asthma, no point is of so great importance as the careful regulation of the diet, which should be light and easily digestible, and of little bulk as possible, avoiding starchy and saccharine substances. (Bartholow.)—*College and Clinical Record.*

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ORIGINAL COMMUNICATIONS.

PNEUMONIA.*

BY H. MARSHALL, M. D., MONMOUTH, ILL.

As a belief in the specific nature of pneumonia is one that influences directly its treatment, I will briefly notice some of the arguments for and against the theory that maintains acute, or croupous, pneumonia is due to a specific cause, as distinguished from the theory that it is first a local inflammation of the lung, producing the fever and other constitutional disturbances.

Some of the advocates of the specific theory claim the view that it is strictly a local inflammation of the lung, to which the pyrexia and other symptoms are due, is altogether untenable.

The truth of this statement, they say, becomes obvious from a study of its natural history. The disease runs a typical course. The pyrexia bears no definite relation to the extent of the lung affection. It frequently precedes it by a considerable interval, and often disappears suddenly, and long before the resolution of the pulmonary consolidation. Respecting the exact nature of the disease, they are at present unable to speak definitely, some claiming that, like the specific fevers, it is due to a specific cause, differing from these in not being contagious. Croupous pneumonia cannot, they insist, be produced by artificial means, and it must

therefore be admitted that there is something special in the inflammatory process. The diseases to which it bears most resemblance, according to their theory, are tonsilitis and acute rheumatism.

Jurgensen says: "It is a plain deduction from the laws of causality that a causal connection between two things cannot be predicated, unless quantitative changes in the one are accompanied by quantitative changes in the other. In pneumonia, no such dependence can be traced, the smallest pneumonic consolidations often running their course with the severest fever, and on the other hand, we find extensive inflammations with a very moderate fever, small consolidations with high fever and severe constitutional symptoms, and solid infiltrations with a comparatively slight fever and general disturbance. This is the rule, and not the exception."

That croupous pneumonia runs a course more nearly typical than the catarrhal variety, is generally conceded; but that the difference in type is due in one to a specific or constitutional cause, and in the other to a local inflammation, is not satisfactorily shown,—it being admitted by the advocates of the specific theory that catarrhal pneumonia is a

*Read at the meeting of the Military Tract Medical Society, at Bushnell, Ill., Oct. 23, 1888.

primary, local inflammation of the lung, and that the fever is produced from that cause. Here we have two varieties of pneumonia, the anatomical lesions of which are almost identical, and when advanced to the second stage, in the absence of any evidence in relation to the first stage, the physical signs would be entirely inadequate to determine to which variety the case belongs.

Is it usual for results so nearly assimilated to be produced by dissimilar causes? Is it not more presumable to attribute the difference of type in the two varieties, to bronchial complication present in one rather than to the existence of two distinct causative agents. That the pyrexia bears no constant relation to the extent of the lung affection is not in accordance with my clinical experience. That it does not always bear a constant relation to the extent of the lung affection is freely admitted. Indeed, it would be strange if it did. When we think how varying are the susceptibilities of those who are attacked by the disease, a very slight pneumonia in one, producing alarming constitutional disturbance, while a pneumonia of double the extent of the former, occurring in another person, would produce nothing more than the ordinary amount of febrile excitement. Now these differences in the severity of the fever are not due to difference in the type of the disease, but to the idiosyncrasies of the patient, and may, and do, occur in any type of fever, and also in any other disease.

With reference to the fever preceding the evidence of disturbance in the lung, my experience has been that the pain over the seat of the inflammation

has occurred before, simultaneously, or very soon after the commencement of the chill and fever. But, of course, there is scarcely any one symptom that may not occasionally be absent.

Suppose you have some cases of pneumonia, in which the febrile excitement precedes for several days, the evidence of pneumonic process. We are aware that this may occur where the portion of lung invaded occupies a central position, remote from the periphery of the lung and pleura, and it is only when the inflammatory process has reached a point nearer to the surface of the lung and pleura, that it would be indicated by much pain, or be discoverable by the physical signs. That the fever commonly disappears suddenly, and long before the resolution of pulmonary consolidation, is just what I would expect to occur, with the qualification that it is usually not a very great length of time. Could we reasonably expect all evidence of a consolidated lung to disappear immediately after the subsidence of the fever? It would be contrary to what takes place in any other local inflammation. What do the physical signs disclose in a consolidated lung? Decided dullness on percussion, entire absence of the respiratory murmur, and in its place bronchial breathing.

These phenomena are due to infiltration of lung tissue from the products of the inflammatory process. The pneumonia has passed through two stages, requiring more or less time in each stage to produce this condition, and time is necessarily required for the lung to free itself from these abnormal products. Whether croupus

pneumonia can be produced by artificial means, such as contusions over the thorax, by penetrating wounds, by the presence of foreign bodies in the bronchia, or by the inhalation of irritating gasses, I am unable to say from personal experience. That the two agents last mentioned would first affect the bronchial tubes, is evident, and when the inflammation reaches the alveoli of the lungs the pneumonia is catarrhal, and croupus pneumonia could not be produced, but that has so little right in the argument its further notice is unnecessary. The proposition of Jurgensen strikes me as very remarkable. That an inflamed lung, even when the inflammation is extensive, and the more extensive it is the less constitutional disturbance it will produce, is so at variance with what takes place in inflammation of other vital organs it would seem as though he could hardly be serious in his assertion.

What is there in a case of croupus pneumonia to not only prevent the local lesion from increasing the amount of fever, but actually to diminish it? According to this hypothesis, if you have an extensive inflammation in one lung, you would expect a very mod-

erate amount of fever, but if you have extensive consolidations in both lungs, then you would bring it within his law of causality and quantitative changes produced by one lung, would be accompanied by quantitative changes produced by both lungs, only in an inverse ratio to what I should expect to find. A belief in the specific nature of pneumonia would influence unfavorably its treatment. As it follows, that if the disease runs a specific cause similar to the specific fevers, local treatment addressed to the lungs would have no influence over the fever or other constitutional disturbances, as a causal connection between the two, according to their theory, cannot be predicted. No constitutional treatment, on the other hand, could exert any salutary effect over the local lesion in the lung, it being nothing more than a constant accompaniment of the disease. If it were a complication, then it would require treatment, but being simply an element, always present, it would require no more consideration than the eruption in a case of scarletina. And yet, the advocates of this doctrine generally concede, the danger to life is proportionate to the extent of the lung effected.

KERATITIS, OR INFLAMMATION OF THE CORNEA.*

BY H. M. HARRISON, M. D., BUSHNELL, ILL.

The cornea, from its exposed location, has entailed upon it, in addition to primary diseases, all the dire results of traumatism, mechanical and chemical irritants, and secondary involvements

from contagious surfaces. Therefore, the inflammation of this delicate structure prevails next in frequency to those of the conjunctiva, and their rational treatment by the general practitioner

is of vastly more importance, as the patient's eyesight may be placed in jeopardy by want of the requisite knowledge in that line.

As a convenient and descriptive classification of the different forms of inflammation of the cornea, the following may be selected: Superficial keratitis, including phlyctenular, vascular, and traumatic; parenchymatous keratitis, including diffused and syphilitic; and, lastly, suppurative keratitis, characterized by abscess and ulceration.

Inflammation of the cornea declares itself, by opacity and development of blood-vessels; or, the formation of pus; also, besides the changes mentioned, of which opacity is the chief one, there will be more or less pain, sometimes radiating or reflected to parts around the affected eye, with increased lachrymation, and a greater or less degree of photophobia. The last symptom is especially typical of inflammations of the cornea, and in children may be very intense. In all cases there is hyperemia of the neighboring vessels, both conjunctival and scleral—a zone of redness extending around the sclero-corneal junction, constituting what is called ciliary injection. The pupil is unusually small, but contractile, and the iris hyperemic.

Phlyctenular keratitis is characterized by the appearance on the edge or surface of the cornea of a small point of opacity and a vessel or bundle of blood-vessels extending to it from the conjunctiva. This soon turns to an ulcer, and is likely to be accompanied by other similar exudations, or a successive crop of them. An areola of faint haziness surrounds each vesicle or

ulcer. There is copious lachrymation, more or less spasms of the lids, and pain in the eye, especially where the patient is exposed to the bright light. In some cases there are symptoms of a general conjunctival inflammation in the swelling of the edges of the lids and a muco-purulent secretion. Children, either ill-fed or over-fed, or of a scrofulous diathesis, are more subject to this form.

The prognosis in mild cases is good, whilst in the severer forms, of long duration, or when the center of the cornea is involved, serious injury to sight may remain.

The treatment of this form of inflammation of the cornea consists in protecting the eyes from the bright light by smoked glasses or an eye-shade, avoiding everything having the semblance of a bandage, as the cooling effect of the atmosphere seems to exert a beneficial influence, and the free escape of the tears, which is of vast importance, is less likely to be hindered. The use of a solution of atropia seems to be orthodox in the estimation of most authors, but I have found that a two-grain solution of the muriate of pilocarpine, instilled into the eye three or four times a day, attains a better and more speedy result, in the early stages, than any other local application. It lessens the intolerance of light by contracting the pupil, while, at the same time, it seems to exert a directly beneficial effect on the corneal inflammation, being painless in its application and free from the irritation to the conjunctiva which is sometimes induced by atropia solutions. Avoid the use of astringents in this as in all other forms of acute in-

inflammations of the cornea. Hot applications continued for an hour or two three times a day, either dry or moist, are always grateful and beneficial. If the patient has acquired the habit of refusing all light, or covers the eyes continuously, drop in a few drops of a freshly-prepared four-per-cent solution of cocaine occasionally through the day, or, if not at hand, a few drops of ice-water does admirably, at the same time cleansing the lids carefully from all secretions.

In cases complicated with considerable conjunctival inflammation, we may, in addition to the above local treatment, instill into the eye, three or four times a day, a solution of ten grains of borax to the ounce of camphor water, it likewise having a good effect on the corneal trouble.

When the acute stage is over, and the disease has not made suitable progression towards recovery, the directing of a little fine calomel into the eye once a day, or the careful application of the yellow oxide of mercury ointment, one or two grains to the drachm of vaseline, may be used with excellent results. Hygienic and constitutional treatment is of great importance in all cases. A simple but nutritious diet must be allowed; proper attention to baths, thorough ventilation,—or, better, the patient taken out into the open air, thereby not permitting excessive avoidance of the light. In cases where the general health seems impaired, the bitter tonics or cod-liver oil are indicated.

Some extremely severe cases, where there is great spasm of the lids, require slitting up of the external canthus, but

this should be reserved for such cases only.

Vascular keratitis results frequently from repeated attacks of phlyctenula (the constant friction of granular lids upon the cornea), while in other cases the cause cannot be traced. The whole of the cornea is covered with a haziness, the epithelium roughened, faceted, and a net-work of blood-vessels over-spreading it. We find a circumcorneal injection, with a moderate degree of intolerance of light, and only a slight complaint of pain. These cases are generally of slow development, and are met with alike in youth and adult.

Where the disease is the result of granular lids, usually, the upper half of the cornea is involved, but there may be that extreme degree developed so-called pannus, when of long duration, having the appearance of a cuticular surface.

The prognosis, as to a return of perfect vision, is not good for imperfect sight will remain after any plan of treatment.

During the acute stage, or an exacerbation of the disease, we should use hot water, applied with a compress, for an hour or two, three times a day and instill into the eye every three or four hours a solution of atropia. After the acute symptoms have subsided, we may begin *cautiously* some stimulating treatment; such as the application of a 4 per cent. solution of tannic acid in glycerine, or an ointment of the yellow oxide of mercury, or the judicious use of the sulphate of copper applied to the lids.

If the disease be due solely to the friction of granular lids, they must re-

ceive appropriate treatment before we can expect any improvement in the condition of the cornea.

Traumatism of the cornea must be treated upon general principles, depending on the conditions found, combating, or anticipating by our treatment, acute inflammatory complications.

Parenchymatous, or interstitial keratitis, is characterized by a smoky haze, beginning at the edge or center of the cornea, and extending over its entire structure, sometimes appearing as if it had been rubbed with sand paper, also there will be some circumcorneal injection.

The subjective symptoms are not very marked in most cases, there being scarcely any photophobia and seldom pain.

Loss of sight is a marked feature of this form. Even where there is a mild opacity, the patient complains that he is unable to see. In some cases the disease develops in a few days; in others it may be very slow, but in all is tedious enough in disappearing.

The disease is almost always of constitutional origin, so much so that many authors consider that it occurs wholly from syphilitic contamination, either congenital or acquired. We should, however, carefully observe the conditions of the glands, skin, nasal passages, bones and the general nutrition, and other specific symptoms.

Both eyes are generally involved in the inflammation. Frequently, when the first one affected is on the road to recovery, the other one becomes involved, so that unless we apprise the

the patient or friends of such a possible occurrence, their faith may be greatly shaken in the medical attendant.

The treatment in this differs from the preceding forms mentioned, for the local treatment is secondary in point of importance to the constitutional treatment.

If the local irritation be acute we should use the atropia solution, the same as mentioned before, but if it is not marked, the occasional use of the solution may be considered judicious to prevent possible iritic adhesions, as sometimes occur from the iris being implicated in the inflammation.

Hot water fomentations as warm as can be borne, are especially efficient, and should be used several hours each day, unless they provoke too much conjunctival irritation, when we may substitute a solution of borax in camphor water, applied *hot*, in the same way. There should be plenty of out-door exercise taken and the eyes protected from the bright light and cold winds by tinted glasses.

As the constitutional treatment is of so much importance, we must meet the indications in each individual case by tonics, alteratives and a good diet.

Ulcerative and suppurative keratitis may be considered together, although we do not wish to imply that they are identical, but are often associated or blended in the same case.

Pus may appear in the substance of the cornea without there being any ulceration of the surface, and some cases of ulcer are attended with suppurative infiltrations, and are liable to develop pus in the anterior chamber. The

cause may be an excitation of a spontaneous inflammation or the result of an injury.

Ulceration of the cornea is seldom met with in infancy, except as a secondary lesion in the conjunctivitis of the new-born; but is quite frequent in children from three to twelve years of age, especially where they are surrounded with bad hygienic influences, poorly fed and of a strumous diathesis.

The symptoms in common, both in ulceration and suppuration, are severe pain, often agonizing, extending to the brow and temple, moderate ciliary injection, photophobia, contraction of the pupil, more or less conjunctival congestion, with, at the beginning, a circumscribed hazy spot in the cornea.

As the disease advances, suppuration takes place in the laminated structure, and the pus thus formed may escape in various ways. It may find its

way externally, giving rise to an ulcer, burrow downwards between the layers of the cornea, forming at its lower margin what is called an onyx, or it may burst through into the anterior chamber.

The treatment which, at the beginning, affords the most relief, is the frequent application of a solution of atropia and the moderate use of hot water. Anodynes may be required if the pain be intense and the eye properly protected by a light bandage.

If there be a collection of pus in the cornea, a dependent opening should be made so that it may escape externally, thereby often saving extensive invasion or destruction of the corneal tissue.

Many modifications are required in the subsequent treatment of these cases, only to be determined by the course they pursue.

PROFESSIONAL REPUTATION.*

BY J. H. COULTER, M. D. PEORIA, ILLS.

Professional reputation I define as that degree of esteem in which a man is held for gentility, professional honor, and professional ability. Thus distinguishing reputation from notoriety, in which a man is known merely on account of his individualities in one or another direction, not necessarily or even usually of particular merit. Reputation is the bubble all seek to capture, no one ever imagining it beyond his power to prevent its bursting when obtained. It is but natural that men should grasp after anything which will

afford them a stepping-stone to success, or as I will say, reputation. There are but few men in our profession who will be willing to admit their lives are nothing to the world, and true it is, our names will live in honor or derision as the result of a few years of life, a few days spent in time. Our profession is such that no one can enter its ranks and remain there long without making a reputation either honorable or dishonorable—a living life, or a nonentity in influence, a bar to the progress of true culture. Do we not always find

*Read at the meeting of the Military Tract Medical Society, held at Bushnell, Ills., Oct. 23rd, 1888.

that he who has caught the true inspiration which will lead his eager, yearning mind to life's highest and noblest deeds is not seeking notoriety, but reputation? Who, by his quiet, undemonstrative, yet very positive existence, draws every one to him with a venerable magnetism, thus framing for himself a pure reputation. Such a man will not suffer by being overestimated. The lustre of his true worth shines undimmed by the rust of egotism or flattery. He wins a reputation in the end because humanity's interests demand that a physician should be estimated only by his true worth.

The world is a serious world, and human life and our profession are serious matters, not to be trifled with or treated with show or hypocrisy, but to be dealt with in all truth, soberness and security. It is not to eat, sleep and drink, to pace round the mill of 'habit and turn thought into an implement of trade. In all these but a poor fraction of the consciousness of humanity, or of the possibilities, are awaked, and the sanctities yet slumber which make it worth while to strive for a reputation. Knowledge, truth, love, virtue, faith, devotion and the human virtues are what gives vitality to the mechanism of our monotonous professional existence. "The laugh that vibrates through the heart, the tear which freshens the dry wastes within," the music which brings childhood back again, the prayer calling the future near, the doubt which makes us meditate, the death which startles us with mystery, the hardship or disappointment which forces us to struggle, the anxiety which ends in trust, are each and all true nourishment to

our growth in the world's estimation.

Thus it seems as I would have you infer my idea of reputation is for something more permanent than practice, more enduring than busts or monuments to our memory; perhaps not infinite, yet not tangible or ephemeral, and hence I remark: Reputation depends on *character*, on a *proper understanding of self*, on *conduct*, and on *knowledge* and its *proper use*.

No one will question the absolute necessity of character in the formation of reputation. If any one element be more essential than all others, it is this same character. Time may possibly to some degree obliterate professional fame; but, if a reputation be compounded of virtue, character and personal worth, it is permanent and lasting as the stars above us. Whatever of excellence is wrought in the soul, character is a conspicuous ingredient in its composition. Real goodness does not attach itself merely to the individual life, and if it does not in your mind point to another world, you must admit its influence on the world about us. Some sort of religion, even though it be nothing more than a reliance on the dictates of conscience, is an indispensable element in the make-up of every great human character. It is the tie binding childhood to youth, and strengthening the spans which lead from youth to manhood, and thence to life's close. If this tie of character be broken, man floats away a worthless atom in the universe, its proper attachments all gone, its destiny thwarted and its future nothing but darkness, desolation and failure. He is out of his proper being, out of the circle of all his duties, out of

the circle of all his happiness, and away, far away, from the hopes of his ambition, and even from the purposes of his creation, and it is not strange that a reputation has no further attractions for him.

Our profession, and the world, is wanting more than ever, it seems, men of thought and candid, decisive action; men who can and will control this wayward nature; men who will boldly stand out in opposition to every form of evil and wrong, be it in professional, social or political circles; men who will mould the minds, desires and wills of those whom they influence to respect and love the right, and stand true to themselves; men, in short, who want a reputation founded on character. This is not a mere harangue of sentimentalism, but fact; not the dream of an optimist, but a truth which we may daily see exemplified.

"Know, then, thyself," cannot have a more trite application than in the building up of a reputation—it is the corner-stone in the structure where character is the material used. Wisdom will teach us our capabilities, prudence restrain from overstepping them and teach us to walk circumspectly, ambition spur us on to application, while good judgment will keep us ever modest under the highest honors; and with these workmen, the superstructure will be beautiful and grand enough to adorn the streets of that eternal Eden—a perfect reputation. Will you be a memory, a sounding word-chain, a feeble factor on illustrious themes, one of the world's million chatterboxes; or a will, a power, a man? No varnish and veneer of scholarship, no command of rhetoric and the tricks of

logic, can ever make you a positive force in the world. You must possess a great heart in which reason, right and truth, regal and militant, are fortified and encamped.

But a knowledge of self is not alone sufficient, it must be accompanied by a persistent, fearless effort, bidding defiance to the threats of jealousy. If there is one thing above another admirable in man's action, it is bravery, one who dares under any circumstances to do as conscience dictates, and "turning to the devil tell him he is a devil." Any success achieved is not worth having unless it has required some effort to obtain it. It is constancy and continuousness of effort, rather than brilliancy or fertility which make men great. There are men in the profession who have ever pursued an honorable course, and have never yielded to the temptation to use the arts of empiricism, however strong they may have been. I admit, a certain number are true from fear of the consequences, but such men amount to nothing when discussing this subject. I anticipate the difficulty to be presumed in combining the element, ambition, character, energy, self-knowledge and wisdom, and not include a degree of fanaticism or egotism. But I dare say it is proven possible by the reputation of that man who is ever ready to help a deserving younger member of the profession—men who do not, when once they have attained a height, turn round and kick down the ladder by which they ascended. The clasp of a kind and friendly hand, the beam of a sympathizing eye, the sound of a gentle or gracious word, will often do the

dispirited and disheartened toiler more good than dollars. How much grander is the man, in our opinion, who carries these little amenities with him all along the path of life, and scatters them broadcast, not for the mere sake of reputation, but where they will illuminate the heart of a brother whose troubles may be deeper than our ken can penetrate. Oil the machinery of daily existence about you thus and see how much more musically the wheels will turn. Those who shine most brilliant were usually diamonds in the rough in the early years of their career. They were men who had to solve the problem of life by combining brawn and muscle to work out the brilliancy of their minds and latent powers. But in this development they bring out such a fund of sympathy for the unfortunate and erring one, such a fraternal care for suffering humanity, such a recourse of hope, that to inspire others with the same hope did not in the least impoverish them, such a magnanimous charity that the men and women and children forgot their faults, if they ever had any, and would ever be their constant friends and defenders. They have attained the greatest perfection in their own souls by study of

the relations of other souls. They have originated and perfected plans for a greater prosperity and a grander, nobler happiness to the ever struggling race of humanity. They have developed all the human virtues into brightest ideas, and thus lifted themselves into a higher sphere and more conscious nearness to sublimity.

In these scattered remarks on a subject as broad as human life and various as the actual and possible combinations of the elements of human nature, I have attempted to indicate the great vital fact in human affairs, that "all influential power in all the departments of practical, professional, intellectual and moral energy is the expression of character, of forcible, persisting and calculable men, who have grown up into a stature more or less colossal through an assimilation of material or spiritual realities. This fact makes production the test of power, imprints on production the mental and moral imperfections of that power, and with a sort of sullen sublimity declares that as a man is so, shall his work be. It thus remorselessly tears off the gaudy ornaments of opinion with which conceit bedizens weakness and exhibits each individual in his essential personality."

ACONITIA IN TRIGEMINAL NEURALGIA.*

BY J. G. TAYLER, M. D., ASHTON, ILL.

On the 17th of October, 1887, a young lady, tall, slender, blonde, aged 20 years, came into my office complaining of severe and long-continued

toothache. The history revealed that three years previously she had had a severe attack of pain in her jaws, both upper and lower, which caused her to

*Read Before the North Central (Ill.) Medical Society at LaSalle, Ill., December 4, 1888.

seek a dentist and have two teeth extracted, with the happy result of relieving the pain entirely. Very soon, however, the pain returned, and she again went to her dentist, this time having several teeth filled, the pain, as before, being removed, only to return shortly as severe as before. Thus she went on, the attacks becoming more frequent until she was seldom free of pain, though at times it was scarcely noticeable, then suddenly becoming most excruciating. In this condition she came to me on the above mentioned date, and asked that I remove several of her teeth, which she thought were aching. I diagnosticated trigeminal neuralgia, and counseled delay in the extraction of the teeth, some of which were in really excellent condition, and, moreover, it was getting dusk, and I very much dislike extracting teeth by lamp-light.

I gave her a little cocaine, (4 per cent. solution) with which to rub her gums, and a small vial containing a dozen pills of aconitia, strength $\frac{1}{10}$ grain, with directions to take one pill three times a day. I noticed that she made some remark to a companion concerning "those little things," but I paid no attention to it, and she left the office with the cheering remark that her father would settle the bill, which, I am glad to say, he did promptly. An hour afterward I was summoned in great haste, as "something was wrong, but they didn't know what." I found the young lady in a state of extreme agitation, walking the floor, wringing her hands, and occasionally sobbing hysterically. She said she had no pain, and did not know what was the

matter, but could not control herself at all. When I told her to lie down and keep quiet, she lay down, but almost immediately sprang up and recommenced her walking, wringing her hands, and sobbing, etc. She said she thought the pills too small to do any good, so had taken three of them at once. Fifteen minutes afterwards, while putting on her wraps, for she was intending to spend the night with a friend, she felt the peculiar numbness and tingling in her lips and tongue, but thought nothing of it, as I had told her that she might expect something of that sort. She started to her friend's home, but when about half way there she suddenly experienced giddiness, her feet lost sensibility, so that it seemed to her that a cushion, or some soft, thick substance was between her feet and the ground, her fingers felt the numbness and tingling that greatly increased in her lips and tongue, and, to use her own expression, she "felt that she must fly." She turned and ran home, a distance of at least thirty rods, without, she says, losing her breath in the slightest degree, though, when I saw her, her respirations were shallow and labored. She frequently sighed; her pulse extremely feeble, though of the usual rate; her surface cold and clammy; her temperature 97° Fahr. (*natural for her 98.2°*); pupils moderately dilated; sight slightly impaired. It seemed—indeed was—impossible to keep her quiet. Under the use of whiskey, ammon carb, and digital, her heart regained its power, her flesh took on a natural feel, and in three hours she was quietly sleeping, with the exception of an occasional slight

start or moan. The next day she remained in bed, complaining of much weakness and complete anorexia, but her toothache was gone entirely. I saw her a few days ago, when she assured me that she had not had the slightest discomfort with her teeth since that time, now nearly fourteen months, and did not believe they would ever ache again. Since that time I have treated several cases of neuralgia by the same method, but not always with success.

One case of sciatica was quickly relieved by three pills a day, and so far

as I know there has as yet been no return of the disease. In another case, that of a strong, robust man, I obtained no relief whatever from as many as twelve pills daily, though it is but fair to state that this was a very obstinate case, yielding very reluctantly to the deep injection of chloroform.

From what experience I have had I am inclined to restrict the use of aconitum to those cases whose cause may be found in well-defined peripheral irritation, as the drug seems to act with the greatest quickness and certainty upon the extremities of the nerves.

THE USES OF GELSEMIUM.*

BY G. F. SCHREIBER, M. D., WEST BROOKLYN, ILL.

Gelsemium sempervirum is not as frequently employed by the regular profession as it should be. The fact that it has been used largely by the eclectics should not defer us from using a valuable and reliable remedy. The indications of this remedy are varied and manifold. As a febrifuge in typhoid fever, bilious fever, remittent and intermittent, it is an efficient and powerful drug, and can be administered without depressing the system like other arterial sedatives.

In those cases of cerebral excitement with spasmodic disturbance, it will calm the nervous system and control a hysterical patient much better than a dose of opium or morphine and without any bad after effects or habits to contend with.

In irregular contractions of the uterus

during and after labor, it has proved of much value in my hands. I call to mind, some time ago, of an hour-glass contraction of the uterus in a tedious case of twins, prima para, wherein one placenta was delivered, while the second one was retained up in the fundus, with an hour-glass contraction around the middle of the organ which resisted all efforts at removal. It was impossible, even after persistent trial, for me to pass one or two fingers through the constricted portion. I then administered twenty drops of tincture gelsemium, and within fifteen minutes I had the satisfaction of removing the placenta without trouble.

In the early stages of acute bronchitis, with a distressing cough and no secretions, with much pain across the chest, gelsemium will relieve this con-

* Read before the North Central (Ill.) Medical Society, at La Salle, Ill., December 4, 1896.

dition, start up expectoration and diminish the inflammatory tension.

In two to five drop doses it can be relied on to relieve persistent coughing.

Combined with *vir. veridi*, it will do excellent service in pneumonia in the acute stage by relieving pain and stasis of the blood current.

For the relief of pain of all the neuralgias it is the drug *per se*, and should be administered in ten to fifteen drop doses, combined, if need be, with minute doses of morphine. For neuralgia of the fifth pair of nerves, pleurodynia and similar conditions, it is an excellent remedy.

In diseases of children, it is a remedy which is at once efficient and agreeable to the taste as well as safe to administer. Here again it is of much value to allay excitement of the nervous system during dentition, and many cases of convulsions in children could be avoided

by the early administration of this remedy. It is always a safe remedy; it does not irritate the stomach and bowels; the sleep from it is natural, and the child will awaken refreshed; it does not create a habit; its toxic symptoms are striking and appear early, and overdoses can be obviated.

In conclusion, I would say gelsemium exerts a specific influence upon the brain, and, to a less extent, upon the spinal center and sympathetic. It relieves irritation and determination of blood to the brain, marked by flushed face, bright eyes, contracted pupil and restlessness. It is also of much value in dysuria from stricture, and irritability of the neck of the bladder will be relieved by its use.

The tincture from the green root has proved more reliable in my hands than other preparations. The dose varies from two to twenty drops, as will be indicated by its effects.

REPORT OF A CASE OF CANCER OF THE PLEURA.*

BY F. M. PENDLETON, M. D., MAGNOLIA, ILL.

Anna M., aged 17. About March, 1887, first noticed a small tumor growing on the flexor surface of the left arm, a little below the elbow, which continued to increase in size until the following August, when, in company with her father, she consulted Dr. I. H. Reeder, of Lacon, concerning the nature of the growth, and the proper course to be pursued. He pronounced it encephaloid cancer, and advised immediate amputation of the arm, the tumor at this time being at least two inches

in circumference, and extending from a little below the elbow fully half way to the shoulder. Operation being agreed upon, he amputated the arm in September, 1887, at the highest possible point short of a joint operation, and at least three inches above the upper margin of the tumor. Convalescence was uninterrupted, and the wound healed kindly and perfectly.

I first saw the case March 28, 1888, about six months later, being called in consequence of a sharp, lacerating

*Read before the North Central (Ill.) Medical Society, at LaSalle, Ill., December 4, 1888.

pain in the left side, at the lower margin of the ribs. The patient had been in good health since the operation until this time, except the absence of the previous catamenia.

On physical exploration of the chest, I found a moderately well-developed chest, except atrophy of the pectoral muscles of the left side. There was no disparity in the respiratory movements of the two sides, and the respiration was complete and uninterrupted, but somewhat rapid. On palpitation, could discover no superficial tender points nor deep-seated pain, and vocal fremitus was normal in character. On percussion, the vesicular resonance was perfectly normal, and auscultation revealed no departure from health, the vesicular murmur being clear and distinct over every portion of lungs. The axillary temperature was 98.6 F., pulse somewhat accelerated, due, I thought, to the pain experienced. The pain being very severe, I deemed it expedient to administer an hypodermic injection of $\frac{1}{4}$ grain morphia sulphate in combination with $\frac{1}{100}$ grain atropia sulphate. This had the effect of relieving the pain in a short time. There being no other symptoms present, I resorted to no other medication, but left a few small doses of morphine, with directions to administer them *pro re nata* to relieve pain, and requested them to report to me on the day following. This they did, stating that there was no return of the pain, but that she complained of being weak, but was able to be about. I prescribed one drachm of sulphate of quinine in three-grain capsules, with directions—one to be taken every four hours during the day.

I stated to the father of the girl that I entertained fears that the trouble was the beginning of a malignant growth. While I was not justified in making a diagnosis of cancer, yet the absence of the three tender points corresponding to the superficial portions of the intercostal nerves, excluded inter-costal neuralgia. There being no inter-costal tenderness on pressure, I determined that it was not pleurodynia, and the absence of the diagnostic friction fremitus and friction sound of the first stage of pleurisy excluded that disorder, and lastly, the history of the case led me to a suspicion of cancer.

I did not see the case again until May 2nd, when I was called in consequence of extreme pain, attended with a sense of suffocation. I learned on inquiry that she had, since I saw her in March, been in good health except an occasional sharp, stabbing pain, in the left side, and had on one or two occasions, found it necessary to resort to the use of the morphine that I left at my former visit. She had, however, suffered but little inconvenience from it, attending school regularly until this time. There was still absence of the menses. The appetite was good and no elevation of the temperature, the thermometer registering 98.6 F. in the axilla. The pulse, however, was 120 per m., and was somewhat irregular. There had been some cough, but so insignificant that the friends had hardly noticed it, and was attended with little or no expectoration.

On inspection of the chest, I found the left side considerably enlarged, especially marked at the base, with almost entire loss of motion of the af-

fected side, while the opposite side was abnormally active. The ribs were elevated and prominent, and intercostal spaces somewhat depressed. By palpation the vocal fremitus was entirely absent, while on the opposite side I found flatness over the entire portion of the chest except posteriorly in the inter-scapular region, where some resonance was obtained. On the right side there was exaggerated pulmonary resonance. On auscultation no sounds could be heard over the left side of the chest, except posteriorly in the inter-scapular region, where a slight tubular sound was heard.

The heart was displaced to the right, the apex beat being heard at the fifth intercostal space, an inch and a half to the right of the median line of the sternum.

The patient was emaciated, complexion palid and earthy, some oedema of the ankles, and from this time until death, about three weeks later, there was progressive emaciation and weakness, frequent attacks of syncope and dyspnoea, with the characteristic stabbing pain of cancer. Cough dry, ineffectual and attended with only scanty mucous or frothy expectoration, except at the very last, when there was some admixture of blood. The glands were not enlarged.

Fatal syncope occurred May 25, 1888, about two months after the first symptoms, referable to the chest, and about eight months after operation for removal of the primary growth. Death was caused, I believe, by the displacement of the heart producing torsion of the great venous trunks obstructing their lumen and causing fatal syncope.

The principal difficulty experienced in making diagnosis of cancer of the pleura is in differentiating between it and pleurisy with effusion. The absence of the chill and fever, the almost entire absence of the cough and expectoration, the pain not being influenced by the decubitus of the patient, nor increased by the abrupt movements of the body, breathing or coughing, as is the case in pleurisy, the pain being diffused and ill-defined, instead of being limited to a small space as in pleurisy. Usually in pleurisy the pain ceases with the effusion, if it persists, it indicates a persistence of the inflammation and a consequent elevation of the temperature. In the case reported the temperature was normal throughout.

In cancer of the lung the cough would be more harassing, and the expectoration would be rusty, bloody, or like currant jelly. On auscultation and percussion, patches of normal lung tissue would be found where the percussion note would be normal and the respiratory murmur could be heard, surrounded by dullness, indicating the presence of the cancerous mass.

No autopsy was allowed. The only treatment is the use of opiates to relieve the pain.

In the removal of primary cancerous growths the question arises: Will it pay? Is there enough chance of cure to justify the procedure?

The results of 222 operations performed by the French surgeon Cazin from 1862 to 1886 is indeed fairly satisfactory. He reports 102 cases of scirrhus of the breast. There was secondary glandular affections in 60. Of these 7 were permanently cured,

in 48 recurrence took place, 3 died, and in two the result was not known. In the remaining 42 cases, in which the glands were unaffected, there were 8 cures, 28 recurrences, 2 deaths, and 5 were lost sight of. In 120 cases of encephaloid, the glands were involved in 80. Of these, 5 were cured, the disease returned in 67, 4 died, and 4 could not be traced. In 40 cases where glands were unaffected there were 8 cures. Thus, in a total of 222 cases, there were 28, or 12.6 per cent., permanent cures. Taking the scirrhus cases separately, we find that the total number of cures

was 15, or 14.7 per cent., of the 102 cases. Among the 120 cases of encephaloid 13, or 10.8 per cent., were cured. It appears that the cases in which the glands were involved show a greater number of recurrences than those in which there was no secondary glandular affections. He attributes his success to the freedom with which he removes apparently healthy tissues surrounding the growth, and to the care with which he seeks for and removes not only diseased glands, but the lymphatics between them and the tumor.

SOCIETY TRANSACTIONS.

NORTH CENTRAL (ILL.) DISTRICT MEDICAL ASSOCIATION.

The North Central Illinois Medical Association convened in its fifteenth annual meeting at the M. E. Church, LaSalle, Ills., December 4th, 1888, at 10:30 o'clock a. m. An unusually large number of the enterprising physicians of the six or seven counties constituting its present territory were in attendance and participated in the exercises, which were embraced within morning, afternoon and evening sessions.

Dr. F. C. Vandervoort, of Bloomington, the President for 1888, presided, and delivered a somewhat brief, but entertaining, address upon "The Science of Medicine."

The local committee of arrangements and medical profession of the "Twin Cities," presided over by Dr. Ziesing, of Peru, entertained the visiting members at the Harrison House in a manner most agreeable to those in attendance.

Letters of regret at inability to be present were read from several absentees, and a number of new names were added to the already long roll of membership.

A number of important reports and papers were read, many of which were amply discussed by the Association.

From the Committee on Necrology, Dr. E. P. Cook, of Mendota, presented an interesting sketch with appropriate resolutions relative to the late Dr. John B. Felker, of Amboy. Dr. Chalfant, of Streator, sent, through Dr. Dicus, a similar report of the late Dr. Edward G. Minor, of Streator, and Dr. Cowen, of Hennepin, was instructed to prepare a suitable report relative to Dr. Ralph B. Dyer, deceased, of Ottawa.

The reported illness of Drs. J. Stout, of Ottawa, and Robert Schiffbauer, of Benson, drew forth appropriate expressions of sympathy, which were ordered transmitted to each.

A clinical case, with a benign painless growth of $1\frac{1}{8}$ inches in shortest diameter, springing from the base of the tongue, was presented by Dr. Bruffit, of Paw Paw, and elicited considerable interest, the growth exciting no disturbance in deglutition, and its discovery having been accidentally made by the patient.

Dr. Kinnear, of Henry, read a paper entitled, "The Cystic Degeneration of the Chorion."

Dr. Schreiber, of West Brooklyn, from the committee on "Drugs and Medicines," reported on "The Use of Gelsemium Sempervirens."

Dr. Rich, of Wenona, related an interesting case of "Convulsive Apoplexy."

Dr. Edwards, of Mendota, presented some very fine microscopical slides showing pathological conditions of the skin.

Other papers were as follows:

"Water as a Therapeutic Agent in the Treatment of Disease," by Dr. Robinson, of Wyanet; "Cancer of the Pleura," by Dr. Pendleton, of Magnolia; "Trigeminal Neuralgia Successfully Treated by Aconitia," by Dr. T. G. Tayler, of Ashton; and the report of a case of cancer of the larynx, with

pathological specimen, by Dr. E. P. Cook, of Mendota.

In the evening Dr. G. Wheeler Jones, of Danville, entertained the Association and others present by a public address on the subject of "Contagious and Infectious Diseases, and Public Responsibility Therefor."

The officers of the Association for 1889 are as follows:

President—J. F. Dicus, Streator.

First Vice President—C. E. Davis, El Paso.

Second Vice President—T. H. Stetler, Paw Paw.

Secretary and Treasurer—William O. Ensign, Rutland.

Board of Censors—E. P. Cook, Chairman, Mendota.

Standing Committees.

Necrology and Biography—Chairman, George Ryan, Amboy; Practical Medicine—Chairman, K. E. Rich, Wenona; Surgery and Dermatology—Chairman, J. W. Edwards, Mendota; Obstetrics—Chairman, F. A. Prindle, Streator; Ophthalmology and Otology—Chairman, C. L. Whitmire, Sublette; Drugs and Medicines—Chairman, A. N. Richardson, Ohio.

Time and place of meeting—LaSalle, first Tuesday in December, 1889.

The entire day and evening were industriously occupied in the work of the Association, of which the foregoing is but a brief summary, while the question of continuing future annual meetings to the second day was seriously contemplated, although not as yet fully determined upon.

IODOFORM OINTMENT.—

Iodoform, x-xx grs.
Vaseline, 1 oz. M.

Iodoform, x-xx grs.
Benzoated oxide zinc ointment, 1 oz. M.

Fox gives a very good formula for general use. It will do whether there be present ulcers of the cornea or not:

Hydrag. ox. flav., $\frac{1}{2}$ gr.

Atropiae sulp., $\frac{1}{4}$ gr.

Olei morhuae, xxx gts.

Unguent petrolei, 1 dr.

Ol. rosae, q. s. M.

Useful for conjunctivitis or for keratitis, or as an application to the eye-lashes.

SELECTED ARTICLES.

THE DOCTOR.

A Picture of the Olden Time.

T. P. WILSON, M. D., ANN ARBOR, MICH.

The old-time Doctor rises into view.
 A "well-read" man he was; and much he knew
 For he was "college bred;" and in the eyes
 Of simple folks, no man could be more wise.
 He had a sheep-skin in his office hung,
 Which, like a banner to the breezes flung,
 Proclaimed to all the world his wondrous lore,
 Endorsed by learned men full half a score.
 His modest sign that hung above the gate,
 Failed not his many virtues to relate :
 "Physician, Surgeon, Accoucher," in one;
 And yet with these the list was but begun.
 He knew and numbered all the human bones.
 And well he knew all geologic stones;
 He knew how blood coursed swiftly through
 the veins,
 He knew the cause of summer drought and rains;
 He cured his patients of each threatening ill,
 And matched the parson in polemic skill ;
 In politics, philosophy and art,
 He never failed to take a ready part.
 The master of the village school, his power
 In argument acknowledged; and so, hour
 By hour, they sat in hot dispute; the crowd,
 Meanwhile, each disputant applauded loud.
 But these were by-plays in the doctor's life,
 With other conflicts he was daily rife;
 For fell disease and death rode on the air,
 And found their ready victims everywhere.
 Against these foes, there was no known defence
 Except the Doctor's wise omnipotence.
 And so, whate'er his patients might befall,

He ready stood to answer every call.
 On ambling horse he rode the country o'er,
 And carried hope and help from door to door.
 Where'er he went, to gentle babe or sire,
 Pain fled away, and fever cooled its fire.
 Of modern healing art he little knew,
 His work was plain, and what he had to do
 His trusting patients quietly endured,
 Though oft uncertain if he killed or cured.
 His lancet was his faithful right-hand man ;
 For, at its touch, the crimson current ran,
 Till blood, like water, flowed on every side,
 And every cabin was in crimson dyed.
 His massive saddle-bags with drugs o'er ran ;
 But calomel and jalap led the van.
 His dose the palate did not always please ;
 His pills were large, and bitter were his teas ;
 His drastic mixtures were no idle play,
 And his emetics brooked no long delay.
 In short, his victims, like some luckless craft,
 Were driven amain and swept afore and aft.
 And if at last they died, there was no one
 Dared say, "They died from having nothing
 done."
 He promptly, bravely, took his part and place ;
 And every station did his genius grace.
 Heroic man ! He did his duty well ;
 He fought for others till at last he fell.
 Above his grave we need no column raise,
 He lives immortal in our love and praise !

—*Dietetic Gazette.*

THE MODERN DOCTOR.

Counterpart of "The Old-Time Doctor."

J. T. STEWART, M. D., PEORIA, ILL.

The old-time doctor's had his day
 And now in peace is laid away—
 The modern doctor's on the stage.
 And so it is in every age.
 The people change, the doctors change,
 And bring forth things both new and strange.
 The present age ignores the past,
 Looks to the future, not the past;
 Condemns the solid, steady ways
 Of learned men of other days;
 Demands a light and easy cure
 For all the ills mankind endure.
 The modern doctor trims his sails
 To suit the breeze and ride the gales.
 He's right, he can't control the age,
 Must act his part upon the stage.
 It is a dreadful letting down
 Of the profession of renown,
 But who's the fool and who the sage,
 The one who bucks against the age,

Or he who caters to its will,
 And draws the shekels in his till?
 The stately mien and classic lore
 Of ages past are seen no more;
 All this is fogyism now,
 To which the public will not bow.
 The doctor's made at railroad speed,
 No more for science has he need;
 The pharmacists now have the brains
 And also firmly hold the reins.
 They furnish pills and pellets, too,
 Elixirs, tablets, nice and new,
 Prescriptions, elegant, and sure
 Our every pain and ache to cure.
 For all disease of every kind,
 E'en to disorders of the mind.
 A tempting cordial is prepared,
 So rare and safe it is declared
 No man who takes will ever die
 While sun and moon are in the sky,

With full directions how to use
And ample stores from which to choose.
The modern doctor, sleek and bland,
With manners mild and winning ways,
Now flings his banner to the breeze,
Expects to conquer death with ease;
The old-time fugier he disdains,
None of their armament he retains,
But deals out new and untried means
So dainty and so nice—it seems
So strange long ages passed away
Before the dawning of this day.
He mingles with the rich and fair,
And boasts his skill so great, so rare,
And swears that not a patient dies.
Of course, I do not say he lies,
But somehow people will get sick,
And somehow linger, O, so long;
Somehow the undertaker thrives
Although no patient ever dies;
And somehow men have restive grown
And doubt the power of all means known,

And somehow now the healing art
Has lost its grip on mind and heart.
The people now begin to feel
The modern doctor does not heal,
And what to do they do not know,
On whom or where their faith bestow.
The old-time doctor, brave and bold,
Upon the people had a hold;
Though kind, was feared, respected, loved
In all the circles where he moved;
But in this age all faith is lost,
And men at sea are tempest-tossed;
The old foundations broken down
And nothing new to rest upon.
In time this craze may pass away,
And reason then resume her sway;
The virtues of the old and new
Combine in one more grand and true
Than ever blest the world before,
And faith and hope and love restore.

—*Dietetic Gazette.*

CONGENITAL STRICTURE, OR SPASM OF THE URETHRA, AS A CAUSE OF INCONTINENCE. ITS CURE BY THE SOUND.

BY CHARLES WARRINGTON EARLE, M. D., CHICAGO, ILL.

I do not expect in this brief article to present anything absolutely new concerning a subject of which so much has been written. But it appears to me that from my experience this method of treatment should be employed, as in my judgment some cases are cured that have resisted all kinds of medical treatment and surgical operations. Some of the authors, in addition to speaking of the causes which are regarded as usually producing incontinence, speak of stricture of the urethra, but do not suggest a cure; and many excellent physicians after trying all the usual remedies do not examine the urethra, and abandon the case. I have been led to always explore the tube, and in several abandoned cases have made a cure by the successive introduction of the sound. The following cases illustrate what the sound will do in many cases where all other methods of treatment have failed.

CASE I.—B., aged eight years, had suffered from incontinence during the day for several years, causing his clothing to be constantly wet and at-

tended by the disagreeable odors consequent. A few months ago he was circumcised by the physician then attending the family, but without relief, and he was now referred to me. The gland and prepuce were in good condition from the circumcision, but a No. 7 sound (American) could only be passed to the membranous portion. A few days after I succeeded in getting into the bladder, and continued the treatment for about six weeks, using at last a No. 9. The result was all that could be desired, and he is now away on his vacation perfectly well.

CASE II.—C., aged fifteen, has suffered with incontinence since a baby. Urine has been passed involuntarily two or three times during the night and several times during the day, particularly when exercising. He has been hired, scolded, punished, and doctorered without relief. I gave him the bromides, tonics, belladonna, and cantharides without any benefit. July 26, 1886, passed sound. Slight constriction near neck of bladder, which yielded to slight but continuous pressure.

Consulted me six or eight times during the following two months; used sound; recovery complete. He had passed through the hands of several excellent physicians and they all failed, because they neglected to explore the urethra.

CASE III.—J. J. H., a bright and smart fellow; parents healthy. When about sixteen months old he was taken with heat in head and flushed face. At these times he would be fretful and uneasy. The mother would bathe his head, which would relieve him temporarily. At the same time she noticed that he had erections, but did not appreciate their significance. About one year following these symptoms he had some kind of a stoppage of water, which the mother attempted to cure by domestic remedies, but failing, he was taken to a surgeon. Here he was treated for a period of two or three months, probably for adherent prepuce, but without relief. Another surgeon was consulted, who attempted therapeutical relief, with a like result. A general practitioner was the one next consulted. He frankly admitted that he failed to understand the case, but prescribed: no abatement of symptoms. Another gentleman of excellent reputation had him under treatment for three months. He claimed to thoroughly understand the case, but said little, and did no good. He was now taken to one of the oldest and most experienced men in this city, who declared his penis was all right, but gave medicine, with no improvement. Next a specialist on nervous diseases examined him, who, of course, pronounced it a disease of the nervous system, and assured the parents that the boy would certainly outgrow it. He looked up standard German and French authorities and declared that there was not a parallel case on record. By this time the little fellow began to notice the erection of his penis, and would cry out, "It is stiff, it hurts; cut it off and put it in the fire." This and like ex-

pressions were frequently made, and he was in such a condition that but very little rest was obtained during the night. He would go to sleep for perhaps one hour, then quickly waken, nervous and trembling. Things were absolutely unbearable, and at this time, about April, 1886, he came under my care. I found the glans penis congested and purple on retraction, and operated. Following the ordinary operation for phimosis and adherent prepuce, I passed a sound, and found, as I do in many cases, what appeared to be an obstruction from spasm of the circular fibres of the urethra. The sound was used a few times and the boy gained in every possible respect. About the middle of 1887, I passed a No. 11 and found but little constriction, and the past year has been of enjoyment and freedom from nervous symptoms.

July 20, 1888.—The patient has been a little irritable for one week, but with this exception he has been perfectly hearty and jolly during the year. He is now six years old, and his nutrition is excellent.

The recital of these cases with the method of cure presents nothing new, although I am somewhat surprised that so few of the authors even speak of stricture as a cause of incontinence. Everybody, or at least everybody who is at all well versed in paediatrical literature, examines the prepuce and glans penis of every case coming to him for this trouble, but I am afraid that many excellent practitioners do not examine the urethra. Not every case has spasm of the urethra, but many do. Not every case can be cured by the sound, but many who have received every other form of treatment and have not been relieved can be cured by this simple process. The pathology of these cases is not well defined in my mind. Is this a congenital difficulty or acquired? Is this constriction due to reflex causes? These questions demand future consideration. I only

present a few clinical facts. In closing, however, I may say that, considering the vast number of congenital defects which we know take place, I see no reason why there cannot be in this part of the body certain deficiencies which have always existed, and until cured remain the exciting cause of this troublesome disease.

Let me again repeat, that in every

case of incontinence which has resisted the ordinary routine treatment, use the sound. This single instrument has performed more cures in my practice than all the drugs which I have prescribed, and as many as have been cured by operation for phimosis, or elongated, contracted, and adherent prepuce.—*Archives of Pediatrics.*

THE CONNECTION BETWEEN MASTURBATION AND STRICURE OF THE URETHRA.

BY SAMUEL W. GROSS, M.D., LL.D., PHILADELPHIA, PA.

Although masturbation has previously been recognized by several writers as a cause of organic stricture of the urethra, I was, if I do not mistake, the first to call prominent attention to that fact in the *Med. and Surg. Reporter*, May 5th, 1877, and subsequently in the three editions of my brochure on "The Diseases of the Male Sexual Organs." It is my present purpose, through the medium of this body, in a very few words, to direct the attention of the general practitioner to the very common occurrence of stricture in masturbators, in order that he may search for a factor in maintaining the disorders, both local and general, to which these persons are subject.

In the second edition of my brochure the statement will be found that, of 173 masturbators, one or more strictures were detected in 151, or 87 per cent. Since the appearance of that edition, I have had 157 additional cases, and find that, out of a total of 331, strictures were present in 291, or 88 per cent. The last 157 cases were carefully examined as to the caliber, number, and seat of the coarctations, and my remarks will be confined to these cases alone. In order that there may be no doubt as to the accuracy of the observations, it should be stated, first, that the examinations were conducted with

the soft acorn-headed bougie upon patients who had never suffered from gonorrhœa and many of whom had never had sexual intercourse; and, secondly, that when, in addition to a stricture at or near the meatus, other coarctations were discovered, the final diagnosis of the more deeply seated ones was made only after the division of the stricture at the orifice.

Of the 157 cases, one or more strictures were present in 140, or 89.18 per cent., and absent in 17, or 10.82 per cent. In 19.3 per cent. the caliber was below 21 of the French scale—the smallest having measured fourteen millimetres in circumference; 22.6 per cent. ranged between 21 and 24; 51.5 per cent. between 25 and 27; and 5.6 per cent. between 26 and 31 millimetres.

Of the 140 examples of stricture, there was one in 82, or 58.57 per cent.; two were found in 41, or 29.29 per cent., and from three to six were present in 17, or 12.14 per cent. Of the 82 solitary strictures, 65 were seated at or near the meatus; 4 in the spongy portion of the urethra; and 13 in the bulbous division. Of the 41 examples of two coarctations, 31 were found at the meatus and bulb; 4 at the meatus and spongy urethra; and 6 in the spongy and bulbous portions. Of the

7 cases of three strictures, in 5 they were located at the meatus, in the spongy, and in the bulbous divisions, and in 2 there was a single coarctation at the meatus, and two in the pendulous urethra. Of the 7 instances of four strictures, there were one at the orifice; two in the pendulous portions, and one in the bulb in 2; one at the meatus and three in the pendulous portion in 2; and three in the pendulous urethra and one in the bulb in 3. Of the two examples of five coarctations, there were one at the meatus, two in the pendulous urethra, and two in the bulb in 1; and one at the orifice, three in the pendulous portion, and one in the bulb in 1. In the single case of six strictures, five were found in the spongy urethra and one in the bulb.

An interesting fact, deducible from a

study of the preceding measurements, is that in not less than 113, or 80.71 per cent., of the 140 cases, was a stricture found within one-third of an inch of the orifice. It, moreover, appears that when there was only one coarctation it was seated near the orifice in 79.26 per cent. of all cases; while, when there was more than a single stricture, one was present near the meatus in 82.75 per cent. of all examples.

In conclusion, it may be affirmed that, as a result of my personal observations, urethral stricture may be looked for in nearly nine-tenths of all masturbators who have never had gonorrhœa, and that, as a rule, the stricture will be found to be of large caliber, single, and seated near the meatus.—*College and Clinical Record.*

CASE OF PUPERAL ECLAMPSIA TREATED WITH PILOCARPIN AFTER OTHER OTHER REMEDIES HAD FAILED.

BY K. IRVING, M. D. KIRKTON, ONT.

Mrs. C., primipara, the patient whose treatment is about to be described, is a blonde, 21 years of age, of active nervous temperament, of rather slender build, not the typical eclamptic woman of authors. Previous to her marriage I treated her on one or two occasions for anaemia and headache. Since her marriage I had not seen her till called to attend her in confinement, but understood from her friends she enjoyed good health up to that date. This occurred on the morning of the 15th of November last. When I arrived I hurriedly washed and warmed my hands, for the cries of an infant told me the child was born. On reaching the room I found the young patient in a most happy frame of mind (congratulating her mother on being grand-mother), and on seeing me she laughingly chided me for not arriving sooner, asking me at the same time if I did not consider

her very smart; I answered her in the affirmative, and told her to keep perfectly quiet, as she seemed rather excitable.

The nurse remarked that the after-birth was still there, though the child had been born an hour, and pains were severe. After warming my hands in hot water, I told the patient we were going to see if the after-birth was ready to come away. Examination proved the uterus to be firmly contracted and placenta in the vagina. While removing it, the patient said, "Doctor, I am going to faint," and at once went into a convulsion. I immediately injected, hypodermically, one-fourth of a grain of morphia. The convulsion did not last long, and consciousness was soon restored. Then I gave her 40 grains pot. bromid., by mouth. In twenty minutes the second convulsion came on, when I again repeated a one-third grain

of morphia, hypodermically, and sent for assistance. When consciousness returned, gave 35 grains more pot. bromide. She now complained of pain in the head. In one hour and fifteen minutes she took the third convolution, which was longer in duration than the others. The fourth came on in forty-five minutes after the third.

Dr. Rollins, of Exeter, now came to my assistance, and we gave her an enema of 80 grains chloral and 30 of pot. bromide, and another hypodermic of one-fourth grain of morphia. Consciousness did not return after the fourth. We drew off the urine from bladder; examined it and found it laden with albumen, although there was very little swelling of legs or ankles. The fifth convolution followed at 9:30 a. m., about thirty minutes after the fourth. The face was now livid and swollen, the eyes turned upwards, the pupils somewhat dilated, the pulse very rapid. The eighth convolution came on at 12 o'clock. We gave her four drops of croton oil, although the bowels had been freely moved through the night. The convulsions continued unabated, and at 2 p. m. we gave one-third grain morphia, and then resolved to bleed her. She was anaemic, but we thought bleeding might relieve the venous congestion, and in this way bring relief. With difficulty we drew from both arms from sixteen to twenty ounces of blood without effect, except the pulse was made somewhat more compressible. The convulsions still continued.

The breathing was, if possible, more stertorous and labored, the face and body were perfectly dusky. Coma very marked. We concluded our patient would, in all probability, die. I had spoken about pilocarpin as a remedy in those cases; had gone over the success achieved in such cases by Dr. McKeough as related by himself at the Chatham meeting of the Dominion Medical Association, and on the strength of which I secured and carried

about with me a bottle of Wyeth's tablets, so as to be ready should occasion require. All other remedies had failed, and we now concluded to try the effect of pilocarpin. I hurried home for it; for now when wanted I found I had left it, as the Dutchman did his anchor, at home. When I returned—about 5 p. m.—I was greeted by one of the attendants in tears, telling me she was dying. Dr. R. had said she was. We gave a hypodermic of one-third of a grain—this just as a convolution was commencing. In about eight minutes the skin began to get warmer, and the color began to change. The skin became moist, a condition which soon gave place to a moist, copious flow of perspiration. The salivary and bronchial discharge was something which astonished me. Napkin after napkin became saturated, and with a piece of cloth on the finger, or on a stick, we helped to remove the flow. It poured out of the nostrils as well as the mouth. It seemed sometimes, it is true, as though she would be smothered; but then would come an involuntary effort which, with assistance, would expel the discharge. She had two convulsions after the action of the drug began, the first much slighter than those preceding, and the last so slight that very little contortion of the face occurred, and it soon passed off. From the time the medicine began to act the pulse and temperature began to fall. The rapid change in the skin from a dark and dusky, to that of a healthy hue, was as remarkable as the bronchorrhœa. The perspiration and bronchorrhœa continued unabated for four or five hours, then gradually disappeared. Then the breathing became gradually less stertorous. About five the following morning she roused to partial consciousness and was able to recognize me. She dropped off into a quiet slumber and about nine woke up perfectly conscious, complaining of a curious feeling in her head as well as

pain, and of a very sore tongue. She had no recollection of what had transpired on the previous morning or day. She recovered without any further puerperal trouble.

Here is a case in which I think we are justified in concluding that the morph., pot. bromid., chloral and bleeding did no good, and that when death seemed inevitable, pilocarpin was used with advantage. In this case, at any rate, I feel convinced it saved a life, acting first as a nerve sedative then relieving vascular tension and the convulsions, as well as secondly ridding the system, by the emunctories, of the

uræmic poison. Dr. Baker protests against its use as a remedy in those cases, principally from its depressing effects, and because of the danger of smothering from the excessive bronchial flow during coma. Here was a case where coma was deep, yet she did not smother. If depression appears too marked have we not remedies at hand such as ether, to control those depressing effects? Notwithstanding its condemnation by such high authority as Dr. Barker, I think it is a drug which, when used properly, should rank as one of the first in the treatment of puerperal convulsions.—*Canada Lancet.*

TAPPING FOR ASCITES.

BY BENJAMIN W. RICHARDSON, M.D., LONDON, ENGLAND.

In tapping for ascites I have long practiced a little plan which saves a great deal of trouble, and without any extra apparatus entirely prevents the entrance of air into the abdominal cavity. I slip over the end of the canula a piece of india-rubber tubing, and turn the surface of the tube over the end so as to make a flat surface of rubber. I then push the trocar through the rubber, and make it go right home. There is no difficulty in the process whatever, and no interference with the entrance of the trocar through the tissues when the puncture is made. On withdrawing the trocar the opening through the soft rubber closes of itself, and the escaping fluid runs readily through the length of tube into any utensil that may be placed to receive it.

In my early days of practice the almost universal custom was to use a large trocar and to draw off the fluid as rapidly as possible. Under this plan it was necessary to make provision for compressing the abdomen by the bandage, as the body quickly collapsed, in order to prevent the occurrence of

syncope from sudden collapse. The practice was bad, and for many years I have substituted for it the employment of a small trocar, only introducing a large one if the fluid that may flow be too thick and glutinous to pass through a tube of narrow caliber. With a small tube conveying a stream of not more than the eighth part of an inch in diameter, the evacuation of the cavity is slow; but the operation is unattended with any sign of faintness except from fear or mental nervousness on the part of the patient.

To prevent pain in the operation I always use ether spray for benumbing the surface at the point of puncture. It is well to freeze over a space of a disc an inch in diameter, and when the part played on by the spray is quite frozen to put the point of the warm finger on the spot in the centre of the disc, where the puncture is about to be made, so as to soften the frozen skin. This does not restore the sensibility if there be left plenty of frozen tissue around. I have used the spray in this manner thirty times for tapping; have

never failed in rendering the operation perfectly painless, and have never had any untoward result. One patient whom I tapped seven times, and who became accustomed to look on the proceeding with the most perfect unconcern, told me that she was at no time conscious of any sensation beyond a

slight jerk, which was not at all painful. It may therefore be supposed that the peritoneum, as well as the skin, is rendered insensible to the pain of the puncture. In freezing with the spray it is best to proceed slowly, devoting five minutes to the process, so as to ensure deep local anaesthesia.—*Asclepiad.*

COMMON CRAMP.

BY SAMUEL D. HINE, M. R., C. S., NOTTINGHAM, ENGLAND.

It has been my misfortune to suffer most grievously from cramp of the muscle, chiefly of the lower limbs, but often affecting also the pectoral and abdominal parieties. I can find in our text-books only very scant notice of this very common ailment. But I am often informed by patients that they nightly suffer from this troublesome visitor. How is it that its visits are so generally nocturnal? I know of many, who suffer almost nightly, who never get an attack by day. Has position any influence in producing it? But, if so, why does it not come on when they enjoy an afternoon siesta on their sofa? I cannot explain why, but I know it for a fact. My own idea is that the main cause of muscular cramp is *pressure*, in whatever way produced. I knew an old lady, twenty-four years ago, who had a very urgent attack of cramp. I was summoned at 11:30 P. M., and although I resided only half a mile off, when I arrived at the house I found that she was dead. On inquiry from the nearest relative, I made out that after having had a hearty supper of meat and porter at 10 o'clock in the evening, after going to bed quite cheerful and in her usual health, her daughter found her suffering extreme pain from cramp of the chest, and shortly afterwards found her dying. The stomach was distended with undigested food, and the rigor mortis was very marked. Many years ago, at 5:35 A.

M., I received a sudden summons from a patient. He was in agonies—cramp in the stomach, cramp in the thighs and cramp in the cords of his legs. He was a provision dealer, aged sixty-five years. I found him so exhausted with pain that he was very nearly dying from syncope. I ascertained from his wife that on the previous night, at about 9 o'clock, he partook of a hearty meal of pickled pork, onions and red cabbage. A stiff glass of hot brandy and water containing thirty drops of chlorodyne afforded speedy relief. In another case, a gentleman of spare habit was seized at three in the morning with paroxysms of cramp in the thighs and calves. Nothing gave relief until he experienced a copious and very offensive evacuation from the bowels, when the spasmodic action vanished, and he was able to regain his bed in peace. Now, in all probability, had a warm enema been administered at an early period of the attack he would have escaped hours of acute suffering.

I have asserted my conviction that pressure is *the* cause of the muscular spasm usually called cramp, but let it not be understood that I look upon this as the *only* cause. By no means. Indigestion, however produced, favors the disease. Cold, external or internal, will bring it on. Certain articles of food and drink, which I will shortly specify, will cause an attack. But let us first look at what I think to be the

chief cause—*pressure*. A distended stomach, loaded with food of an indigestible character, is one cause; here the paroxysms chiefly affect the pectoral and abdominal muscles, more especially the rectus abdominis. Gas in the stomach, alias flatulence, is another fruitful cause of pressure; also sulphuret of hydrogen in the transverse colon. The rectum loaded with faeces is a frequent parent of this evil offspring, and so likewise is an overfilled bladder. But external pressure will also provoke an attack—*e. g.*, the weight of one leg on another, or too heavy a load of bed-coverings. I have stated that indigestion causes cramp, but how? Acidity develops flatulence, and almost all sufferers from cramp will tell you that they have frequent heartburn. Latent gout is another factor in the production of this distressing ailment. Almost all the sufferers have been hereditarily gouty. The martyrs to cramp are mostly of the upper, well-fed, highly-nourished class—the pampered children of luxury and opulence. I have been struck with the fact of its extreme rarity in dispensary and hospital practice. Again, a large proportion of my patients with cramp have been men. The gentle sex are far more exempt. I attribute this to their being so comparatively little prone to self-indulgence in the matter of food and drink. As a rule, women are moderate eaters and drinkers, although truth compels me to say that there are some exceptions.

Now as to cold. My impression is that cold, whether external or internal, by producing a chill on an over-heated surface of body, will produce severe cramp. I remember six or seven years ago seeing a gentleman in the agonies of pectoral cramp. It was September, and he had enjoyed a long tramp after “the pretty brown birds.” Perspiring profusely, he sat down under a big oak tree for his luncheon, and then had fallen asleep, lying on the long damp

grass, from which the morning dew had not passed away. He was a healthy man, and habitually accustomed to taking long walks and other active exercise. Moreover, he was very temperate in the matter of diet, but his sufferings were so extreme that his gamekeeper and myself had about as much as we could do to convey him to his dog-cart. I might multiply instances, but one will suffice—a case of internal cold. A gentleman staying at a fashionable Dublin hotel, took a stroll in the early morning and returned thither. It was the genial month of August, and he was much over-heated, somewhat tired, and very thirsty. He called for a pint of cold milk, which he took at one draught. The effect was instantaneous. He was seized with agonizing cramp, pectoral and abdominal, evidently accompanied by spasm of the oesophagus (an uncommon complication of cramp). An emetic of sulphate of zinc gave speedy relief, and he visited the Dargle, the Seven Churches, and the Devil’s Glen on the same morning.

The articles of drink productive of cramp are chiefly claret and cider. A patient informs me that if he goes out to dinner and partakes of claret he may surely calculate on a night of cramp. I have known hock act in a similar way; whilst good sound port and sherry are innocuous so far as this affection is concerned. I have found that total abstinence people are not more exempt from cramp than other folk.

As to food. Hard cheese, pork, shell-fish, conger eel, pickles, salads, with the two honorable exceptions of lettuce and watercress, are likely to produce cramp.

Unusual and excessive muscular exertion is another parent of cramp. In how many instances have I known young men who, having been shut up day after day in offices and perched on stools, when they have got their holi-

day and undertaken a tour, fondly imagining they were enjoying themselves; have walked themselves off their legs, and then been rewarded for their toil by a night of cramp. And I strongly suspect that many members of Parliament, who have sat out long nights of debate and then adjourn to the moors, could repeat the same story. The moral of this is: Do not attempt too much; turn not enjoyment into suffering.

We have considered the *exciting* causes of cramp, and now for those which may be classed as *predisposing*. I think the rheumatic or gouty diathesis, irritable bladder, stricture of the urethra, and stricture of the rectum rank in the first class. Sluggish liver, disease of the kidneys, Bright's disease, and Addison's disease take the second place.

Next as to prognosis. This is usually favorable. But I have certainly witnessed more than one death from cramp; not cramp pure and simple, but occurring to patients affected with extreme age, heart disease, or affections of the liver, supra-renal capsules, or kidneys.

Now we come to treatment. This may be naturally divided into preventive treatment and that of the actual attack. First, preventive. I advise no one subject to this ailment to take fluids within two hours of retiring to rest. A biscuit or dry toast should be supper, charcoal biscuit for preference. If the main meal is taken early, let the last meal be partaken of not later than 8:00 p. m. If dinner is a late one, let it not be postponed till beyond 8:00 p. m. A final visit to the closet before retiring will be conducive of a good night. And now we proceed to the treatment of the actual attack. This is so sudden and so severely painful that we ought, as practitioners, to be prepared for the onslaught. I have been in the habit of prescribing for any crampedly disposed patients the follow-

ing pill, to be taken every second night. It has afforded good results:

Ext. conii,	1 gr.
Ext. nucis vom.,	$\frac{1}{2}$ gr.
Ext. belladonnae,	$\frac{1}{2}$ gr.
Pulv. myrrhae,	$\frac{1}{2}$ gr.
Gingerinæ,	1 gr.

But for the actual paroxysms local treatment is the thing. In the slighter cases, cold applied by a wetted sponge will afford relief. Friction by the hand firmly used is also good. But in severe cases I have found belladonna liniment very efficacious; also belladonna liniment with chloroform; and where both have failed to relieve, pure laudanum, actively rubbed in, has proved successful. When all have failed I have no hesitation in giving a careful inhalation of chloroform, which invariably succeeds. But this must strictly be avoided in cases complicated with heart or kidney disease.

And now for the allied affections. The cramps of cholera frequently constitute the principal suffering to the patient; but these, being merely symptomatic, may be dismissed with the passing remark that opium does not seem to influence them at all. Secondly, in spinal meningitis cramps of the legs are very severe, and the lower extremities, although proof to any ordinary impressions (punctures by needles or lancets included) are convulsed and tormented by horrible muscular spasms. If the remedies for the primary disease should prove successful, the cramp ceases; if not, it accelerates and aggravates the bitter end. There remains only to notice writer's or scrivener's cramp, which affects the upper extremities. Evidently it is caused by the constrained position of the hand in writing for many hours consecutively. My own experience in this variety of muscular spasm is limited. Nevertheless, I have come across a few cases, one in particular. An accomplished clerk in the Indian Office was laid aside for eighteen months from his duties. Although a

very healthy young man, the extra duty to which he had been subjected had grievously told upon his muscles. His general health, however, continued good. He could ride, shoot, or fish; but the moment he took his pen in hand his muscles became perfectly rigid. Ultimately he perfectly recovered and resumed his former position. I believe the best remedies to be long abstinence from writing, open air exercise, sea breezes, and salt water shower baths.

In conclusion, I may briefly summarize this paper by stating as my opinion that common cramp is due to internal pressure, gastric, abdominal, or from the bladder; also to cold. It is exceedingly painful. The suddenness of the attack is only comparable to the rapidity of its departure. It is amenable to treatment, both preventive and remedial. It is worthy of the study of scientific practitioners, and the results will reward them for their labor.—*London Lancet-Med. Age.*

PNEUMONIA—ITS INCREASING DEATH-RATE—ONE OF THE ESSENTIALS IN ITS TREATMENT.

The writer calls attention to the increased mortality of pneumonia, substantiating his statements by statistics from the records of the New York Board of Health. The rate has steadily risen from 2,288 in 1878 to 3,707 in 1887—a much larger percentage than the increase in population. His point is that much greater attention should be paid to the ventilation of the sick room. He says that in pneumonia the unaided portions of the pulmonary tissue are for the time being substantially useless for respiratory purposes, and neighboring portions are inclined to be cross and irritable. Complicating the situation, we find fever, more or less intense, and the abnormal heats fret the economy. Kidneys feverishly perform their work, springs, feeding the smaller and larger glands, run dry, and scorched nervous centers rebel. Co-operative disquietude is manifest in every vital atom, and, unless assuaged, a communistic strike, chaos, ashes to ashes

Amid the bedlam, varying in degree with the extent of the initial lesion and collateral sympathy, one strong hope can animate the physician. In the natural course of events the pulmonary obstruction will disappear in a few days, and the lung or lungs gradually resume normal work. Can the patient be bridged to reach the climax? Can the uninvolved portions of the lungs respire

sufficiently to maintain a tolerable condition of the blood until the critical period is passed? This is the great exigency—this is an absolute necessity.

It is clear that the blood requires aeration; can it be revived in any manner so efficiently as through the lungs, nature's method of arterilization? Can pill conceal oxygen, and smuggle through the gastric pouch life to the venous circulation? Can essence of ozone be given to substitute the process of respiration? Can any zephyred antipyretic essentially promote haemotosis? Resources there are to palliate pain, relieve thirst, abate fever and stimulate flagging energies; and all important as these means are, they are almost insignificant as compared with affording pure air in superabundant quantity. While fresh air is essential in the management of all diseases, it is omnipotently indispensable in pneumonia, where the patient is using but a part of the breathing apparatus in the place of two lungs. It is more than ordinary ventilation that is required in such cases. What is needed is a persistent, systematic attention to a constant change of air in the apartment of the sick, by night, by day, each hour, each minute and each second, and the twin companion of each one who enters the sick room should be a volume of genial, pure air.—*Med. Record.*

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EDITORIAL.

THE ILLINOIS STATE BOARD OF HEALTH.

A very strong effort will be made during the approaching session of the Illinois State Legislature to seriously impair the usefulness of, if not entirely abolish, the Board of Health of this State, and physicians everywhere throughout the state should take an early warning and see to it that an institution that has done so much for the health and prosperity of the people, should not be tampered with. Since the establishment of this board, in 1877, eleven years ago, the work accomplished by it has been enormous, and mainly without mistakes. The work then to be done was essentially a pioneer work, and progress was necessarily very slow. Yet, within these years, over fifteen hundred quacks and wholly unqualified practitioners of medicine were driven from the state, thus causing a saving to the people in money alone of hundreds of thousands of dollars yearly, to say nothing of the expense to health and life. Other states soon saw the benefits to be derived from an impartial enforcement of fair medical and sanitary laws, and were

not long behind this state in the establishment of similar laws, until now but very few states in the union are without Boards of Health, many of which are endowed with powers far greater than those which have worked so well in Illinois.

In fact, the Illinois Medical Practice Act has been looked upon with admiration by the whole country, and some of the work accomplished under it has commanded the praise of the best authorities in Europe.

Medical colleges throughout the whole United States have felt its influence and acknowledged its power, and thus it has become a great factor, if not *the greatest* factor in advancing the standard of medical education in this country. This alone should cause every intelligent citizen of this State to be proud of such a home institution, and be willing to grant it all the needed funds to carry on so good a work. Yet quacks, or quackishly inclined physicians, still exist; and since they have no scruples in bleeding the people without conscience, they have plenty of

money to subsidize newspapers with, hence we find opposition to the Board springing up constantly throughout the State.

We are willing to grant anything short of omniscience to the average newspaper editor, but we will draw the line at things medical and sanitary, for the majority of them at least show the most lamentable and unpardonable ignorance when writing on these subjects. Especially is this true concerning utility of medical and sanitary laws and regulations. They deny to the whole medical profession all honesty and disinterestedness, and accuse them of the lowest and most mercenary motives in supporting medical legislation.

This is a subject in which every true

doctor in the State is interested, and all should join hands and uphold laws which have worked so grandly for the benefit of the people of this State.

We are not praising or defending any member of the Board as now constituted, nor do we claim that all their actions have been above criticism, but that it is for the best interests of the people and medical profession in this State that these laws be continued on our statute books we most heartily affirm. The medical profession in Illinois has influence and political power sufficient to secure to them whatever they consider best, and we hope this influence will be exerted against any attacks upon the future usefulness of the Board of Health.

MEDICAL NEWS.

Medical Standard and American Lancet.

DR. H. D. SCHMIDT, the well known pathologist of New Orleans, died Nov. 23, 1888.

DR. ARTHUR VON WERDER was recently attacked by footpads and seriously injured.

THE College of Dental Surgery, Chicago, is about to erect a \$50,000 building.

DR. P. L. MCKINNIE, of Moline, has been elected physician to the head camp of "Modern Woodmen."

IT is stated that Sir Morell Mackenzie has resigned his membership in the London College of Physicians.

THE *Gazette Medicale de Montreal* says that love is a neurosis which begins at the head and ends in the middle.

THE widow of Dr. Crawford W. Long, the discoverer of anæsthesia, was recently killed in a Texas railroad accident.

His "Tympanic Highness" was the title applied by a local diploma mill professor to one of his confreres at a faculty meeting.

AT the late accident in Quincy, Drs. E. Schmidt, Bowan and I. T. Wilson were severely injured. Dr. Bowman has since died.

THE House of Bethlehem, Toronto, is accused of being a baby farming institution. Seventy per cent. of its infantile inmates died last year.

IT is said that one hundred thousand copies of Sir Morell Mackenzie's book

upon the case of Frederick were sold during the first two weeks after its issue.

DR. PAUL GIBIER, of Paris, who is commissioned by the French government to study the cause, development, spread and prevention of yellow fever, has begun his work at Jacksonville, Fla.

VIRCHOW was not confirmed by the government though elected to the rectorship of the Berlin University. Prof. Gerhardt received that honor. Yet Virchow is the uncrowned king in science.

DR. J. J. LEWIS, of Quincy, has observed the case of a young lady who inserted a wire hair pin into her uterus for masturbatory purposes, which some days after he removed with uterine forceps.

THE *Canadian Practitioner* says that from present indications the few corners in Toronto and other Canadian cities not at present covered with medical shingles are not likely to remain long unadorned.

DR. G. J. JOHNSON, in the *Boston Medical Journal*, says that he believes that nearly all cases of human tuberculosis is caused by eating the flesh of animals and drinking the milk of cows affected with the disease.

THE council of the British Medical Association thinks that the publication of the details of the Emperor Frederick's sickness was a violation of professional confidence. The end of that disgraceful affair has not yet been reached.

DR. GEORGE BUCHANAN says that at the August examinations at the Uni-

versity of London in anatomy, physiology and *materia medica* women took ten of the nineteen honors taken by all the schools. Women won the "better half."

THE grand jury of Fulton county, Ga., indicted a druggist of that county for swindling. He sold bismuth subnitrate that contained fifty per cent. of flour. He has been since expelled from the State Pharmaceutical Association.

OF twenty-six medical colleges whose graduates appeared before the Virginia Examining Board, thirteen showed that they were doing bad work. It is more than probable that had all medical colleges been represented, a similar proportion would have been defective.

A COMPANY of Toronto medical students passed the "specialist," "Dr." McCully's house, groaned and hooted. "Dr." McCully appeared at the window, armed with a revolver, and fired among them, and shot Harry Oldright, son of Dr. Oldright.

"Glossopathy" is a treatment of wounds and sores, which consists essentially in getting dogs to lick them. The originator is an American quack who is cow collecting suitable dogs for a "glossopathic" establishment in the neighborhood of Zurich.

A REPUTABLE pharmacist says that a local St. Louis druggist is guilty of the following criminal meanness: He attempts to refill prescriptions which were originally dispensed elsewhere. He will read the label, smell of the container, question the customer, and guess at the ingredients of the medicine.

THE *Weekly Medical Review* thinks that "The medical journal that engages in a wordy war with a representative of the secular press, like the courageous but incautious bull which boldly holds his ground on the railway track against the oncoming locomotive, is daring but not discrete."

A PHARMACIST was fined \$50 in the Court of Special Sessions, New York City, for prescribing on two occasions, for women who came into his store; one of the women testified that she asked the druggist's advice; that the druggist asked to see her tongue and that he then gave her medicine. The other woman was the wife of Henry Loring, the county medical society's agent.

AN Omaha Indian complained to Dr. Bryson, of Dakota, Neb., that he was coughing up his bones. He brought two small pieces of bone with him to prove his assertion. On being closely questioned, he acknowledged that he eaten a snake a few days previous to his trouble. The bones had lodged in his throat, causing a slight ulceration, and were ejected by a paroxysm of coughing.

DR. J. F. GRIFFIN, La., tells of a lady for whom quinine and Dover's powder were ordered in capsules. The patient returned the capsules to be refilled, saying the powders were helping her wonderfully, and that "those little cups are the nicest little things to hold powders I have ever seen." She took off the cap, poured out the powder in a teaspoon and replaced the cap so that they "would be sure to fit."

FROM the Cincinnati papers we learn that Dr. Thad. A. Reamy was lately

thrown from his carriage and seriously injured. Later it is said that he has rapidly recovered. It will be remembered that his colleague in Gynaecology, Dr. C. D. Palmer, was thrown from his carriage last spring and nearly killed. We rejoice with their friends that these gentlemen escaped so well and are likely to be able soon to again engage in their accustomed work.

"PROFESSOR" Leblanc, alias "Dr." Geismardo, has been once more exposed by "Nelly Bly." He was imprisoned in the Oregon penitentiary for infecting a paraplegic female patient with syphilis through sexual intercourse with his "magnetic probe." The Illinois Board of Health drove him from Illinois. The *New Orleans Medical and Surgical Journal*, aided by the *Picayune*, drove him from New Orleans. The Erie County Medical Society drove him from Buffalo, and the *New York World*, through Miss Nellie Bly, has now driven him from New York City.

MRS. GEORGIA J. ROBERTSON has sued Bennett Medical College, Chicago, and Dr. Milton Jay, its dean, for \$5,000. She was proprietor of a patent medicice business in Janesville, Wis. Desiring to become a physician, she says that Dr. Jay represented to her that by a half term of lectures at Bennett Mediical College she could have tickets for the next and last term. She says she went through the first half term at an expense of \$500, but was then refused tickets for a second term, nor could she enter the graduating class of any other college. Besides her expenses, she lost her Janesville patent medicine business, which she sold at a sacrifice.

THE Indiana *Medical Journal* indulges in the following pearls of rhetoric anten the editorial of the *Indianapolis Sun*, cited in the November *Standard*: "It is not our purpose to reply to the *Sun's* ridiculous and ill-tempered strictures on the *Journal*. The *Sun* is like the philosopher's monkey, the higher it climbs the more it exposes the terminal portion of its alimentary canal, and during its existence it has exhibited so often that revolting part of its anatomy to the profession and the public, that its modesty, if ever it possessed that sterling virtue, has been supplanted by brazen impudence, which it imagines will pass current among intelligent people for 'culture' and 'wisdom.'"

C. F. HARRINGTON, a clairvoyant of Madison, Wis., treated a man who had

hip disease for many months for rheumatism, and by reason of this malpractice the patient is crippled for life. He brought suit against Harrington, and obtained a judgment of \$1,500 in the lower court. Harrington appealed, his contention being that he should be free from liability because the patient was fully aware of the peculiar medical school to which he belonged. The supreme court confirmed the judgment of the lower court. It held that the character of the medical school in no manner whatever relieved a doctor from liability from malpractice. The only question in the case was the simple one whether "due diligence" had been used. As it had not been, affirmation of the original verdict was certain.

BOOK NOTICES.

THE THEORY AND PRACTICE OF THE OPHTHALMOSCOPE. A hand-book for students. By JOHN HERBERT CLAIBORNE, JR., M. D., Instructor in Ophthalmology in the New York Policlinic, etc., etc. Paper, pp. 77.

CLINICAL LECTURES ON CERTAIN DISEASES OF THE NERVOUS SYSTEM. By PROF. J. M. CHARCOT, of Paris. Translated by E. P. HURD, M. D. Paper, pp. 155.

The above are volumes of the very popular Physicians' Leisure Library, issued by Geo. S. Davis, Detroit, Mich., at the low price of \$2.50 a year (one volume each month) or 25 cents a single copy.

The monograph, by Prof. Charcot, is especially interesting, not only as

late work from so renowned a teacher, but also as treating mainly on hysteria in the male, a subject concerning which but little has been written, but which Prof. Charcot claims to be frequent, and a frequent cause of mistakes in diagnosis.

MEDICAL DIAGNOSIS — A MANUAL OF CLINICAL METHODS. By J. GRAHAM BROWN, M. D., Fellow of the Royal College of Physicians of Edinburgh, late Senior president of the Royal Medical Society of Edinburgh. Second edition. Illustrated; 12 mo., cloth; pp. 285. New York: E. B. Treat, 771, Broadway, 1888. \$2.75.

This is one of the most useful and valuable books the publishers as yet included in his library of medical class-

ics. It is a treatise on the science of diagnosis, and should be read and carefully studied by every practitioner. Methods of examination of patients are given fully and explicitly, and the deductions therefrom are plain and intelligible. It is only by a thorough knowledge of every change which disease can produce in the body that the physician can form any clear conception of what that change imports, and it is this knowledge that this work gives. It is a first-class book to put in the hands of the medical student after his first year.

ATLAS OF VENEREAL AND SKIN DISEASES, comprising original illustrations and selections from the plates of Kaposi, Hutchinson, Neumann, Fournier, Ricord, Otis, Hyde and others, with original text. By PRINCE A. MORROW, A. M., M. D. To be published in fifteen monthly parts—large folio—each part containing five chromo-lithographic plates. Parts viii-ix. New York: Wm. Wood & Co., 1888. Price per part, \$2.

Part eight, before us, contains illustrations, with accompanying text, of Seborrhœa, Comedo Milium, Sudamina, Typhus Fever, Typhoid Fever, Variola, Varicella, Rubeola, Rubella Scarlatina and Erysipelas.

Part nine contains Erythema Marginatum, Erythema Papulatum, Erythema Iris et Circinnatum, Herpes Iris, Erythema Nodosum, Urticaria, Urticaria Pigmentosa, Eczema Capitis, Eczema Faciei, Eczema Papulosum, Vesiculosum et Impetigenosum, and Eczema Squamosum. They are all executed in the best style known to modern illustrators, and are faithful

representations of the diseases they portray.

TREATISE ON THE DISEASES OF WOMEN. For the use of Students and Practitioners. By ALEXANDER J. C. SKENE, M. D., Professor of Gynecology in the Long Island College Hospital, Brooklyn, N. Y., formerly Professor of Gynecology in the New York Post-Graduate Medical School, Gynecologist to the Long Island College, President of the Gynecological Society, 1887, etc., etc., etc. With 251 engravings, and 9 chromo-lithographs; 8 vo., cloth; pp. 966. D. Appleton & Company, New York, 1888.

For many years Dr. Skene has been widely known as a student and teacher of gynecology and the writer of many articles on his chosen branch of medical science, but this is the first continued and complete work from his pen. In it we would expect to find, as we do, everything eminently plain and practical and well adapted to the use of the advanced student, as well as the practitioner of medicine. Dr. Skene has drawn largely upon his great and varied experience in the preparation of this work, eschewing theory and keeping closely to the direct line of what *he knows* to be facts, which he presents in an elegant, simple style. A number of illustrative cases follow the discussion of each topic, and add not a little to the practical value of the work. The publishers have issued the work in their best manner, both as to type, paper and illustrations, making altogether one of the best American text books on gynecology that we have any knowledge of.

PEPISCOPE.

PROPER NAMES IN MEDICINE.—The following list is translated from *La France Medicale*:

Addison's keloid	Morphea.	Friedreich's disease	Hereditary locomotor ataxy.
Addison's disease	Bronzed skin.	Gerlier's disease	Paralytic vertigo.
Alibert's disease	Mycosis, fungoid.	Gilbert's pityriasis	Rosy pityriasis.
Aran-Duchenne's disease	Progressive muscular atrophy.	Gibbon's hydrocele	Hydrocele with voluminous hernia.
Astley Cooper's hernia. Crural hernia with multilobular sac.		Gilles de la Fonnette's disease	Motor inco-ordination, echolalia and coprolalia.
Aagyll-Robertson's sign. Absence of pupil reflex.		Goyrand's hernia	Inguino-interstitial hernia.
Basedow's disease	Exophthalmic goitre.	Graves' disease	Exophthalmic goitre.
Bazin's disease	Buccal psoriasis.	Graefe's sign	Dissociation of the movements of the globe of the eye and of the upper eye-lid.
Beclard's hernia	Hernia opposite the saphenous orifice.	Guyon's sign	Renal ballottement.
Bell's palsy	Paralysis of the 7th pair.	Harley's disease	Paroxysmal hemoglobinuria.
Bell's spasm	Convulsive facial tic.	Heberden's rheumatism	Rheumatism of the smaller joints, with nodosities.
Bergeron's disease	Rhythmic localized chorea.	Hebra's disease	Polymorphous erythema.
Boudin's law	Antagonism of paludism and tuberculosis.	Hebra's pityriasis	Chronic pityriasis.
Poyer's cyst	Sub hyoid cyst.	Hebra's prurigo	True idiopathic prurigo.
Brown-Sequard's syndrome	Hemiparaplegia, with hemianesthesia of the other side.	Hedoch's purpura	Purpura with intestinal symptoms.
Cazenave's lupus	Lupus erythematosus.	Heselbach's hernia	Crural hernia with multilobular sac.
Charcot's disease	Ataxic arthropathy.	Hippocrates' facies	Agonized facies.
Charcot's disease	Lateral amyotrophic sclerosis.	Hodgkin's disease	Adenitis.
Cheyne-Stokes' respiration	Uremic respiration.	Hodgson's disease	Aortic atheroma.
Cloquet's hernia	Pectenial hernia.	Huguier's disease	Uterine fibro-myoma.
Colles' fracture	Fracture of the lower end of the radius.	Hutchinson's teeth	Syphilitic teeth.
Colles' law	Non-infection of the mother by her syphilitic child.	Hutchinson's triad	Syphilitic teeth, interstitial keratitis, otitis.
Corrigan's disease	Aortic insufficiency.	Jacob's ulcer	Chancroid.
Corvisart's facies	Asyolic facies.	Jacksonian epilepsy	Partial epilepsy.
Cruveilhier's disease	Simple gastric ulcer.	Kaposi's disease	Xeroderma pigmentosum.
Donders' glaucoma	Simple atrophic glaucoma.	Kopp's asthma	Thymic asthma; spasms of the glottis.
Dressler's disease	Paroxysmal hemoglobinuria.	Kronlein's hernia	Inguinal, propertitoneal.
Dubini's disease	Electric chorea.	Laennec's cirrhosis	Atrophic cirrhosis.
Duchenne's disease	Locomotor ataxy.	Landry's disease	Acute ascending paralysis.
Duchenne's palsy	Pseudohypertrophic palsy.	Langier's hernia	Hernia across Gimbernat's ligament.
Duhring's disease	Dermatitis herpetiformis.	Leber's disease	Hereditary optic atrophy.
Dupuytren's disease	Retraction of the palmar aponeurosis.	Levret's law	Marginal insertion of the cord with placenta praevia.
Dupuytren's hydrocele	Encysted hydrocele.	Littré's hernia	Diverticular hernia.
E. Wilson's disease	Generalized exfoliative dermatitis.	Ludwig's angina	Subhyoid infectious phlegmon.
Richstedt's disease	Pityriasis versicolor.	Malassez's disease	Cystic testicle.
Erb's palsy	Paralysis of the roots of the brachial plexus.	Meniere's disease	Labyrinthic vertigo.
Erb Charcot's disease	Spasmodic tabes dorsalis.	Millar's asthma	Stridulous laryngitis.
Fouchard's disease	Alveolo-dental perioстиtis.	Morand's foot	Foot with eight toes.

Parrot's sign	Dilatation of the pupil on pinching the skin.
Paget's disease	Pre-cancerous eczema of the breast.
Paget's disease	Hypertrophic, deforming osteitis.
Parkinson's disease	Paralysis agitans.
Parry's disease	Exophthalmic goitre.
Pavy's disease	Intermittent albuminuria.
Petit's hernia	Lumbar hernia.
Pott's aneurysm	Anastomotic aneurysm.
Pott's fracture	Fracture of the fibula by divulsion.
Pott's disease	Vertebral osteitis.
Raynaud's disease	Symmetrical asphyxia of the extremities.
Reclus' disease	Cystic disease of the breast.
Richter's hernia	Parietal enterocoele.
Rivolta's disease	Actinomycomis.
Romberg's sign	Unsteadiness of ataxics in darkness.
Romberg's trophoneurosis	Facial hemiatrophy.
Rosenbach's sign	Abolition of abdominal reflex.
Salaam, tic de	Convulsive salutation.
Scemisch's ulcer	Infectious corneal ulcer.
Storek's blenorhoea	Blenorrhœa of the upper air passage.
Stokes' law	Paralysis of muscles subjacent to inflamed serous or mucous membranes.
Sydenham's chorea	Common chorea.
Thomsen's disease	Muscular spasm at the beginning of voluntary movements.
Tornwald's disease	Inflammation of Luschka's pharyngeal gland.
Velpeau's hernia	Crural hernia in front of the vessels.
Volkmann's deformity	Congenital tibio-tarsal luxation.
Wardrop's disease	Malignant onyx.
Weil's disease	Abortive typhus with jaundice.
Well's facies	Ovarian facies.
Werlhoff's disease	Purpura hemorrhagica.
Westphal's sign	Abolition of patellar reflex.
Willan's lupus	Lupus tubercular in form.
Winckel's disease	Pernicious cyanosis of new-born infants.

—Med. Times.

The following formulae are taken at random from various sources, and will be found useful in general practice:

PAGENSTECHER'S OINTMENT.—

Yellow oxide of mercury, x-xx grs.
Vaseline, 1 oz. M.

Used in some forms of ophthalmia, more especially in phlyctenular con-

junctivitis and pustular disease of the tarsi, and in tinea tarsi. Sometimes a good modification of the above will be:

Yellow oxide of mercury, 6 grs.
Sulphate of atropiae, $\frac{1}{4}$ gr.
Vaseline, 1 oz.

Less irritating than the above, and indicated in cases of extreme sensibility, more especially if nebulae of the cornea appear.

RED OXIDE OF MERCURY.—

Red oxide of mercury, 15 grs.
Vaseline or cosmoline, 1 oz. M.

This ointment is very stimulating and was formerly highly esteemed in the treatment of granular ophthalmia. The yellow ointment seems to have replaced it in many clinics, probably on account of its being milder and less irritating.

CALOMEL AND VASELINE.—

Calomel (best English), 1 dr.
White vaseline, 1 oz.
Oil Rose, 2 gtt.

This makes a very kind and mild application for the eye, and will not produce much irritation, and is good for small phlyctenulae of the cornea. I have found it advisable sometimes to wash the calomel in water and dry before mixing with the vaseline. Some forms of calomel contain a little free bichloride of mercury, which is very irritating and should never be used in a salve. The English calomel seems to be almost free from bichloride. Bichloride, however, may be used in solution.

SOLUTION BICHLORIDE OF MERCURY.—

Bichloride of mercury, 1 gr.
Distilled water, 6 ozs. M.

This makes a solution of 1 to 2,500, and may be used to wash the conjunctiva. Sattler has recommended the use of the bichloride in much weaker solutions—1 to 5,000; and the Moore-fields Ophthalmic Hospital, of London, uses a solution of 1 to 3,500—about one grain in eight ounces.

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ORIGINAL COMMUNICATIONS.

FEE BILLS.*

BY W. J. CHENOWETH, M. D., DECATUR, ILL.

Solicited to write an article on fee bills, I submit the following:

So long as the practice of medicine and of surgery requires time for preparation, and capacity for performance, it is not probable that its votaries will be satisfied to receive for their services, the answer of a good conscience only, however much they may esteem their vocation.

It has been customary, therefore, to agree amongst themselves to charge certain prices for specified attention. And in the code of medical ethics we are advised to adopt in every town or district some general rules relative to pecuniary acknowledgments from our patients, and that it should be esteemed a point of honor to adhere to these rules "with as much uniformity as varying circumstances will permit."

It is less difficult to adopt a fee bill than to carry out its provisions. It is not questioned that there should be uniformity in the charges of physicians practicing in the same neighborhood. But the unequal qualifications of physicians, the difference in the pecuniary condition of patients, and the degrees of responsibility in the cases treated, make it almost impossible to collect like fees from all of our patrons. It is

with propriety, therefore, that the code says, that our adherence to the rules should be with such uniformity only as "varying circumstances will permit." While amongst honorable men an approach to regularity in charging and in collecting is observed, there are disreputable practitioners who evade the rules by making unnecessary visits and in making low charges. Such men are often noisy in praise of the code, and are horrified at any infringement of its rules, but, like the society woman, who sneaks into a neighbor's kitchen and by lying promises entices the hired help to engage in her service, these men make still-hunts, in person, or by proxy, to the houses of the patrons of their rivals, and by promises of better treatment, for less cost, insinuate themselves into practice. It is not strange if, like their counterparts, they will be found to have made their best impression at their first visit. Others, by exaggerating the danger, or misrepresenting the character of the disease, collect exorbitant fees. Of the two classes, the latter is the more dangerous, as impudence and assumption will command a larger practice than craftiness and cowardice. With the sliding scale of prices necessarily adopted by the profession,

* Read before the District Medical Society of Central Illinois, November 20, 1888.

and the varied circumstances of the afflicted, it is scarcely possible to punish a doctor for an infraction of the fee bill.

Skill, industry, and business capacity are so different in the members of the profession that it is not possible to approximate the income to be expected from practice. But with the present low standard of qualification, and the number of doctors struggling for maintenance, it is probably fair to expect, about, the same compensation for service in the *aggregate*, as is received by contractors and builders in the same locality. To be content with less would leave the profession without manhood or self-respect. Amongst the difficulties attending the accumulation of property by doctors, probably none is greater than forced attention to the poor. While the civil authorities provide amply for such services, by the appointment of "county doctors," and by building excellent "poorhouses," these factors oppose their acceptance. First, the patients refuse from false pride. It would seem that if a man had paid taxes in a county, and by misfortune had lost his property, he ought not only to receive proffered aid from the county, but that he should demand it as rightly belonging to him, just as a soldier who was disabled while in the service of his country can justly claim a pension. Instead, he usually is insulted if requested to call for such aid. Second, the perverted views of the community in reference to the duty of doctors. The citizen who does not feel under obligation to feed and clothe the sick poor is indignant at the refusal of a doctor to give of his skill and prop-

erty to the poor, even if when well they were vagabonds and criminals. The honest poor are but seldom slighted, however wrong it is to encourage the community in burdening the doctor with their care. In the third place, the doctors themselves are largely to blame, because of a maudlin sentimentality which converts them from business men to missionaries, as if their calling was holier or better than that of their fathers who held the plow, or of their brothers who shovèd the plane.

The practical operation of the fee bill in regard to the varied circumstances of the patients, and the interpretation given by different doctors, make it difficult, many times, to decide what should be done. A few suggestions may be of service in determining. Present a bill in accordance with the kind and amount of service rendered. If the party says, "I will not pay," sue him. If he says, "I cannot pay the amount," cut the bill down until satisfied that it is as much, in proportion to his ability to pay, as what you usually collect of his neighbors. If he is of that numerous class who will not pay a full bill, and from whom it cannot be made, take what you can get, not only on the ground that "half a loaf is better than no bread," but to get clear of his patronage. Tell him as soon as you get the money in your hand, "When you or any of your family get sick, hereafter, either pay us our fee for each visit in advance, or employ some other doctor." Strange as it may seem, this does not always drive them off, but it prevents them from refusing to pay in any future case in which you may be employed by them. Never

discount a bill for any other reason than those mentioned. Always collect full fees where the service has been responsible, and the patient is able to meet the charge.

A few instances, selected from my experience, will explain better than any general statement, what the people expect from a doctor and what I think that doctors should do. Some years since I attended a poor man who had consumption. As I was very busy at the time I visited him but once a day. One hot day in August a neighbor called at my office and asked if Mr. C. was not very sick. I replied: "He is beyond the aid of a doctor and will soon die." Ought you not to see him oftener than you do? "I cannot think that greater attention will do him any good." He then said: "You should cheer him up and make his sickness lighter." "It is possible that I might if I had the time, but as social visits are very expensive to doctors I cannot afford to make them." He then said: "He lives closer to you than to me, and I go to see him three times a day and pray with him." This nettled me, and I repelled pretty roughly. He was a teamster. "You go in the morning before you engage in your day's work, at noon when your horses are resting, and at night when your work is done. You lose neither time nor money, while absence from my office may cost me the loss of a patron whose business is worth hundreds of dollars. Now, Mr. S., if you will pay me for *one* visit a day I will go to see him as often as you do." He said: "You undertook the case voluntarily, and I do not intend to hire you to pay necessary attention to him."

"I certainty do go to see him voluntarily, and you are not responsible for the attention, unless you request me to render more than my judgment dictates as right. He now owes me about twenty-five dollars, and I do not expect to get a single nickle for my services, in fact, have no charges on my book. If you wish me to render more attention I will go six times a day for two dollars." I then proposed to go for one dollar, but he had no idea of employing me. I had the satisfaction of telling him that "any one who would go to see a man as he did, and was not willing to contribute a dime to his comfort was a canting hypocrite, and that his prayers were not worth the loss of time and breath spent in saying them." This man is a fair sample of many who think that a doctor ought to give his time and skill to every pauper that demands it, and that he does not do his duty unless he spends the greater portion of his time in visiting the sick poor. One more illustration. Mr. M., a wealthy farmer, residing about four miles from Decatur, asked me to go to his house to see a farm hand. "Yes," I said. "You will pay the bill, of course?" "Why, no. It is as much as I can do to board him." "But, Mr. M., board is only worth four dollars a week, and my visit is worth as much; and if once in the case I may have to pay a great many visits, so that I will contribute to your hired man, daily, what you give once a week." In reply, Mr. M. said, that as the weather was pleasant and the roads good I could easily make the trip in two hours, and that my loss would not be anything. At this juncture a gentleman called and

asked me to prescribe for him, and in return handed me a dollar. He had not left the room before another entered, and he, too, paid me a dollar. After the last one had left I said to Mr. M.: " You see that I would have lost two dollars by going with you, and not a half hour has passed. You can now understand why I charge four dollars to visit your house." He saw the point, and like the honorable man that he was, said: " Come, I will pay your bill. I now understand why a doctor charges so much for his visits."

If I have made anything clear it is that a fee bill should be so made that it may be compressed to meet the purse of the poor man, and expanded, in responsible cases, to reach the coffers of

the rich. And that we are not under any obligations, on account of our calling, to treat the poor gratis, and thus cut off the recourses of our family to meet the unreasonable demands of the recipients of our attention, of the illy-advised community, nor of the Miss Nancyism of the profession.

The Decatur Medical Society has copied from the Jacksonville fee bill the following preface to their fee bill, which I can most heartily endorse: " While no one is justified in charging more than the value of his services, yet each member is left to his full discretion to increase or to diminish his own rate of compensation, in view of the pecuniary circumstances of his patients, or a conscientious estimate of his services.

DISLOCATION OF CERVICAL VERTEBRAE.*

BY F. D. RATHBURN, M. D., NEW WINDSOR, ILL.

On July 7th last I was summoned to attend H. P., a girl aged fourteen years. About one hour previous to my arrival, while attempting to look over her shoulder at some object to which her attention had suddenly been attracted, she felt something give way in her neck, accompanied by great pain and a cracking sound distinctly audible to persons present. I found her lying upon her back with her head resting on a pillow. Her face was pale; pulse normal; no difficulty in breathing; she could not move her eyes, and there was great difficulty in swallowing. There was great pain and tenderness on pressure on the right side of the neck in the region of the third and fourth cervical

vertebræ. There was also pain extending down the right arm. The head was thrown forward, the chin being directed toward the left side, and rigidly held in that position. The family stated that for a short time after the accident she was unable to move her arms. Careful examination failed to discover any displacement of bone, or bony crepitus. From the symptoms present, I believed it to be a right unilateral dislocation of the third or fourth cervical vertebræ.

Acting upon this view of the case, I directed her father to make counter extension upon her shoulders (the patient lying upon her back). Then, grasping her head firmly and making steady, firm extension for some time, I elevated,

* Read before the Military Tract Medical Association at Bushnell, Illinois, Oct. 23.

and at the same time rotated, the chin toward the median line. In doing so I distinctly felt a sliding sensation, such as bones impart in the reduction of dislocations. Her head then assumed its natural position. She at once expressed herself as being greatly relieved, and could move her eyes and swallow without difficulty. I then placed a small, firm pillow under her head, with a cushion packed closely on each side of her head and neck in order to prevent lateral movement. I directed her to remain in that position and make no effort to move her head in any direction. She made no attempt to move for one week. Her neck was at first stiff and painful, but she was soon able to move the head as before the injury.

Since Mr. Laurence established by dissection the possibility of dislocation (without fracture) of one vertebra upon another, great additions have been made to our knowledge of this subject. Probably, however, but few cases will come under the observation of any one surgeon. Therefore, as the personal experience of each is necessarily limited, every case reported furnishes additional material to the fund of general information. Uncomplicated cases of dislocation occur most frequently in the cervical region. The greater range of motion, oblique direction of the articular surfaces, horizontal direction and shortness of the spinous processes all render this region more liable to this accident. Dislocations of the vertebrae may be complete or partial, backward or forward, unilateral or bilateral. They may or may not be accompanied by fracture of the bones. According to Lidell, in all bilateral dislocations of cervical vertebrae

the intervertebral substance is torn through and the upper vertebrae is displaced forward on the lower. Where fracture also exists, combined with the dislocation in the five or six lower cervical vertebrae, the intervertebral substance is also torn through and the displacement is the same. The fracture being found usually in the spinous process laminae or pedicles of the displaced vertebrae but not in its body. The spinal cord may be torn, bruised compressed, or disorganized. Hemorrhage may take place between the cord and its membranes, or in the substance of the cord. As a result of these occurrences, there is a liability to immediate and almost complete paralysis in all the parts supplied by that portion of the cord below the seat of injury, and to subsequent inflammation of the cord and its membranes. The symptoms of cervical dislocations are more or less displacements of the head, it being at the same time held rigidly in one position; displacements of the spinous and transverse processes—more or less paralysis below the seat of injury. In some instances the patient will feel something give way in the neck, or there may be a cracking sound heard by others. In bilateral dislocation, as a result of the great displacement of the bones, there is a liability to complete paralysis below the seat of injury, due to pressure on the cord. This, occurring above the third vertebrae, may result in instant death, due to paralysis of the phrenic and other nerves of respiration. There is great pain in the neck; usually difficulty in swallowing, and disturbance of respiration. Frequently there is priapism. The head, in a forward disloca-

tion of the vertebra, is usually thrown forward, the chin being depressed toward the sternum. In backward dislocations the head is thrown back. Where there has been great laceration of ligaments, or, according to Hamilton, when the system has been greatly shocked, there may be preternatural mobility of the head. In unilateral dislocations we usually find the head turned more or less to one side, the chin being depressed. As there is not so much displacement of the bones, there is usually less paralysis than obtains in bilateral dislocations, and in some cases there may be none at all. Irregularity in the line of the transverse and spinous processes can in many cases be discovered, and there is usually tension of the muscles on the side on which the dislocation occurs, with relaxation on the opposite side. Paralysis, when at first absent, may subsequently appear, due to injury of the cord at the time of the accident.

Dislocation of the occipital bone upon the atlas is produced by forcible bending of the head upon the atlas, together with the application of great force. There is, I believe, no instance recorded where this dislocation has been produced by direct traction upon the head. Dislocation of the atlas upon the axis is usually also produced by flexion of the head. It may be produced by violent twisting of the head, and in children by direct traction. Dislocations of the other cervical vertebrae are produced usually by violent flexion of the neck. They may also be produced by direct violence, as blows upon the neck; by traction and rotation, and in cases of unilateral dislocation, by muscular effort in turning the head. Spontaneous dislocations have

been known to occur as a result of disease.

But little now need be said in regard to diagnosis in addition to what has already been given. Absence of bony crepitus would indicate the probable absence of fracture completing the dislocation. In some cases, however, it will probably be impossible during life to determine whether a fracture exists or not.

Usually the prognosis is more favorable in unilateral than in bilateral dislocations. As a rule the nearer the respiratory centers the dislocation takes place, the graver is the prognosis. Occurring above the third cervical vertebrae, instant death frequently results. Unfavorable prognostic signs are: Increase of paralysis, or paralysis coming on where it was at first absent; increased difficulty of swallowing and breathing, and increase of the temperature of the body.

Regarding the treatment of dislocations of cervical vertebra a division of opinion has existed. Many high authorities have held that an expectant treatment should be adopted, and that attempts at reduction, if made at all, should only be made where there is of evidence impending death. On the contrary, equally high authorities maintained that as soon as possible after a dislocation had been made out, an attempt should be made at reduction. I think that at the present time most surgeons entertain the latter opinion. Reduction should be attempted by making extension and counter extension with rotation of the head. In some cases direct pressure on the bones will be required, either behind, or, in some

instances, in front, by passing the fingers into the mouth and pressing against the posterior wall of the pharynx. Reduction having been accomplished, the patient should be kept in the recumbent position, a small, firm pillow placed under the head, and bags of sand placed at the sides of the head and accurately molded to it so as to prevent lateral movement. This position should be maintained as long as may appear necessary. The details of after treatment should be met according to indications.

When there is paralysis, special attention should be given to the bladder. If there has been much injury to the cord and its membranes, steps should be taken to guard against subsequent inflammation. When hemorrhage is suspected, ergot and hamamelis should be given. Finally, if after recovery from the dislocation paralysis should still continue, iodide of potassium should be given, with the idea of promoting the absorption of inflammatory deposit.

ON THE SCIENCE OF MEDICINE.*

BY F. C. VANDERVOORT, M. D., BLOOMINGTON, ILL.

Gentlemen of the Society:—Under the present system of modern organization, be it political government, a commercial or scientific organization, be it ever so small, it is demanded from the head of such government, or such commercial or scientific organization, to deliver an annual message or address—a duty which I am called upon to fulfill, regardless of my ability.

There is nothing succeeds like success, and a man never made an address until he "made an effort," as Mrs. Dombey did *not* do. This is the age of society aggregations, and of many words, and when we recollect "there is nothing *new* under the sun," how futile are our efforts to say something original.

I have labored hard and long over a subject for this address, months and months, before I ever touched pen to paper, and finally leave it nameless. Pollonius said to his son, "Seek no

quarrels, but once being *in*, acquit yourself like a man." I might say right here, no young man of modest disposition will presume to lecture his seniors unless the honor is forced upon him. It was a great surprise to me when my name was mentioned for president, and though feeling timid and unfit, I could not refuse. It is my *first* society, and will always be dear to me. I shall always take lively interest in its meetings, although I have removed from the district and have joined other associations. These reunions are good things, and my only regret has been that they were so few and far between. The meetings are so far apart we almost forget there is such a society, and forget who are its officers.

The average doctor, in my opinion, not from impecuniousness but from avariciousness, will stay away from his society for fear he will lose a call or a chance to prescribe. *E Pluribus Unum*

* Presidential Address, delivered at the Meeting of the North Central (Ill.) District Medical Society, LaSalle, Ill., December 4, 1868.

is the motto of our Nation, and we all heartily believe that in union there is strength. Let us, then, urge our brethren to come to our feast of reason, and let us not forsake the assembling of ourselves together, which I believe is as essential in things medical as in things spiritual. We may gain much of the current improvements in our numerous medical journals, but how unreliable are the reports we read. It seems that the most of the writing for the journals is done by men who do the least practice and the most theorizing. The journal cannot take the place of the society. Let me cite an article in the Medical Record of Aug. 2nd, in regard to Salol in pleurisy and rheumatism. It is written by a Russian (I will not try to pronounce his name) of Warsaw, Russia. He says it must be given in doses of from two to three drachms, daily, small doses not producing the desired result. He gives fifteen or twenty grains every two hours, and cures his patients in from five to seven days. If this is reliable, then we have a most valuable remedy for pleurisy and rheumatism. I am afraid to use it in such heroic doses. Let the daring ones verify the truth of the treatment. To the *young* practitioner such reports are misleading. The public dislikes to be experimented upon, if it does like to be humbugged. The maxim to "Prove all things and hold fast that which is good" often results in a funeral in the field of medicine. Of course there are exceptions in the case of articles in the journals. We gather up many valuable hints; and, furthermore, the noted names of our great teachers, subscribed to articles, brand

them as genuine and worth considering.

We do not expect the *elaboration* in our local societies that we get in the State and National meetings, but we do get more real profit from the truthful statements of the men we are personally acquainted with. We must *commence* in the local society, and there learn that we have the nerve to be heard in the larger organization, where a man's inferiority becomes so manifest to himself, that he will not dare to open his lips for very awe.

We should not hide our light under a bushel. Some cities not far distant have been noted for their bad feeling among the doctors. The community very soon notices that doctors have little or no respect for each other, consequently, it very soon loses its respect for the profession. A physician not long ago said to me that he thought the "Golden Rule" a proper and sufficient code of ethics. It is very true, and if it were followed by all men the medical millenium would be at hand. If we cannot admit *all* physicians to our society, I believe it would be a good plan to *organize one*, admitting all who are trying to relieve the sufferings of human flesh, who will leave off his *pathy* and say, I am a *Doctor of Medicine*. I can agree with a homeopath as long as he will remain inside the bounds of *common sense*. The physicians of other schools are no more anxious to meet and counsel with *us* than than we are with *them*, but has not all this a bad influence on the public? They observe different factions, each claiming to be *right*, and the natural query arises, which is right, or are any o them right. We should not abuse

each other; perhaps we are *all* right. We are all trying to accomplish the same results, but by different methods. There is no doubt about it, there are several roads to Boston. If we choose to go on a vestibule train, let our neighbor go via steamboat and freight train. A hearty co-operation of physicians of *all schools* for their own protection against dead beats would result advantageously to the profession. If we would make a rule not to visit a patient discharging another physician until he settles his bill with that physician, and live up to it, we might perhaps teach certain classes to pay for their medical services. I believe doctors are more or less to blame themselves for the habits of some patients about the pay. I believe people have to *learn* that they must *pay* the doctor. Give people to understand that this is the way we make our living, and *cannot* work for nothing. "The laborer is worthy of his hire," in whatever field of labor.

There is one thing I do object to, and that is being called *Old School*. I can remember when that meant something old, and antiquated, and out of style to me. I claim we are in the advance in improvements, and should be, if we are *not*, true eclectics, choosing good from whatever source. There is no doubt much good has resulted from reform schools in medicine. Calomel is a good medicine, and is used more often to-day in one-eighth and one-quarter grain doses than in five and ten grain doses, and with better results. The variations in medicine have been often compared to the oscillations of a pendulum. We are very much like the Romans after all, "Always seeking

after some new thing." Now it is the festive microbe, and it is still a question whether the microbe is a cause or an effect. The *public* are just beginning to grasp the germ theory, and the man on the street corner can tell you all about the causes of disease. The doctors, many of them, doubt the correctness of the so called germ theory. I *never* have been a believer in it. Microbes do not seem to hurt a well person, but always the sick. When a man is sick the fluids then form a proper cultivation field for the germs which are omnipresent. They may perhaps add to the virulence of disease, hence it is proper to use germicidal remedies. At present the professional pendulum is swinging towards the new anti-pyretics, the products of coal-tar, viz., anti-fibrin and anti-pyrine. I long ago commenced a careful study of some anti-pyretics, aconite, veratrum, and gelsemium, and the more I use them the more am I convinced of their efficacy in febrile states. Doctors are prescribing anti-febrine nowadays, in my opinion where aconite would be much more preferable and more surely indicated. I do not get good results from anti-pyrine, and am afraid of its depressing effects. I have heard an old and experienced physician say often, that aconite is the child's remedy, and he has been eminently successful. Let us study these remedies more, and be proficient in their use.

The most remarkable anti-pyretic effect of a medicine that has come to my knowledge, was recently in a case of puerperal fever, when the fever was ranging along at 106 degrees, and reached 107 degrees. Quinine with

fel bovis inspissatum or ox-gall, were rubbed up together, and given five grains each day, every four hours.

Dr. Wm. Henry Porter, Professor of Clinical Medicine in the New York Post Graduate Medical School, gives the highest place to fel bovis inspissatum as an anti-pyretic. He says in Medical Records, "The remedy which strikes strongest at one of the main sources of the increased temperature, is the pure ox-gall. The administration of bile causes the milk to curdle in fine flakes and be more perfectly digested. It prevents intestinal decomposition, and stimulates a gentle peristalsis, which favors the capillary circulation of the intestine and increases the rapidity of absorption. The fel bovis also increases the perfection of the intestinal digestion, which, together with a more rapid circulation and peristalsis, causes absorption to be most perfectly accomplished; at the same time these favorable conditions decrease the amount of effete and irritating substances that can be drawn up into the system with the nutritious elements. As a result, the liver receives a much larger quantity of pure nutritive material and a smaller amount of irritating and deleterious matter, consequently, the work required of the hepatic cells is lessened, and the nutritive pabulum reaching the system at large is better in quality, and the nutrition in general is kept at a higher standard. The resulting excretory products are necessarily more perfectly formed, and are less vitiating to the excretory organs. We now find the abnormal heat-producing power reduced to a minimum, *less stored*

up, and the excretory organs better able to eliminate whatever increased heat is developed. Thus the original poison is given less chance to injure the system, and it is easily and rapidly eliminated." This has reference particularly to continued fevers, such as typhoid. He says, furthermore, in regard to anti-febrin and anti-pyrine, and the coal-tar products generally: "Although many articles have appeared, praising the usefulness of this class of remedies, we have the above plain facts in opposition to their use. *This much can be said, it has not been proven that they in any way antidote the poison, neither have they shortened the duration of the diseases in which they have been administered, or decreased the mortality, while there is much proof to the contrary.*"

Diaphoretics, he says, are true physiological anti-pyretics, for they assist the skin to excrete more heat, by keeping a larger volume of blood near the surface of the body, and thus keep up a more active evaporation. They also aid in the elimination of the effete material of the system. Aconite and veratrum viride come under this head.

One sentence in regard to *alcohol* seems to cover the whole ground of its action. "It also acts as a serviceable anti-pyretic by diminishing body oxidation, and at the same time applying to the system hydro-carbon that it can utilize. In this way more water is produced, diaphoresis and diuresis increased, and the heat radiating power augmented. At the same time it improves the general nutritive condition of the body and aids in preventing heart failure."

I now wish to call your attention to peroxide of hydrogen. In this we have a valuable remedy for suppuration. Being a very powerful oxidizing agent, it unites with the pus and utterly destroys it. I have used it in healing up a large, scrofulous abscess after trying other things in vain. My experience with it in such cases led me to try it in a case of empyæma with a copious discharge. For ten days it discharged continuously. I used injections of bichloride of iodine in 500 without any apparent benefit. I then commenced using the peroxide with an equal bulk of water as an injection into the pleural sac. The result was a most happy one. It cleaned the cavity out thoroughly, the effervescence causing the solution to penetrate all sinuses and cavities, and in less than one week the discharge stopped and the wound healed. I am resolved to try this remedy on the membranes in diphtheria. I believe it worthy of trial, and have faith to believe that it will be a *sine qua non*, as those of Rush will remember was a favorite expression with Etheridge.

The so-called Christian Science folks are still in the field and make as wild and irrational claims as ever. A very sensible lady recently told me in all earnestness that very soon I would either have to join the Christian Scientists or my occupation would be gone. She was one of the "living witnesses to the truth of the system." You will perhaps smile and understand the situation perfectly when I tell you this lady is a chronic doctorer, and after exhausting the resources of homeopathy, has fallen into the hands of the above scientists.

She loaned me a journal of the sect, and in it was an announcement that I ask the society to inculge me in noticing. It was an announcement of their Medical College in Boston. The study of obstetrics embraced three weeks under the instruction of Mrs. Eddy, who taught the metaphysical part, and a certain homeopathic physician the anatomical part, whose knowledge of anatomy was an important adjuvant to Christian Science. Tuition \$200, in advance.

We are all of us often asked by outsiders if the practice of medicine will not in time all be done by specialists and the family doctor become a thing of the past and be left without a field for his work. Such a state of things is impossible, as will be seen by a little reflection. If one looks over the lists of the causes of death, he will see that the infectious fevers produce one-fourth of all the mortality, each death representing five to ten cases of sickness; he will find that phthisis and bronchitis produce nearly one fifth, pneumonia a twelfth, Bright's disease a fifteenth of the annual deaths. One-third of this mortality also occurs among children under five years of age, too young to be very much specialized, while about one-twenty-fifth of cases of severe sickness are obstetrical. Practically, all acute illness, all obstetrics, paediatrics, and a large proportion of accidents, injuries and minor chronic ailments must remain under the domain of the general practitioner. There is certainly field enough for him.

I have now conducted this resume to sufficient length, and will close by thanking the society for the honor conferred upon me, and by asking each one

to renew his obligation to the society, and promise himself to miss no more meetings, and to help build up a strong and enduring society. And now I close with what Bill Nye telegraphed

to the Indiana State Medical Society at its last meeting: "Sorry I cannot be there. May you and associates continue to take life easy, as heretofore."

THE DUTY OF CONSULTING PHYSICIANS.*

BY CHAS. W. HALL, M. D., KEWANEE, ILL.

The profession of medicine stands pre-eminently *the* profession of all professions; some, perhaps, approach it, but none ever equals. Law, ministry, and medicine are the acknowledged legs of the professional tripod, upon which the world rests. But how different are these legs. They are so uneven that the greatest amount of support given to the tripod comes from the medical leg. What do these legs support? The law holds up peace to the body, the ministry peace to the soul, while medicine supports both of the others in bringing peace to body *and* soul.

The law shows man nothing but the errors of his way. The ministry shows him the way unto life, while we show the way unto life, and too oftentimes the way unto death. The law and ministry are incompatible—the more of one, necessitates the less of the other; and being a believer in the advancement of Christianity, I can imagine a time when men will cease to quarrel, or if they do, they will arbitrate in the settlement, thus doing away with all necessity for lawyers. I believe, even now, their business grows less, year by year. The world will continue, and man will propagate his species. Year

by year he will grow more populous and crowded. The more people, the more demand for doctors. So, to us, the future brings assurances of plenty to do. Again, our mode of living, developing our nervous systems at the expense of the others, tells us we are getting overbalanced, and our susceptibility to diseases will be greater, and new disorders will arise to remind us that ours is an onward and upward profession, every year opening new fields for thought and experiment, and every day enlarging our work and responsibility. Without a just conception of this responsibility no one can successfully meet the expectations of the people; no one can properly fulfill his mission as a physician. Without it the aim of our profession is perverted, and we fall far short of doing the good it calls us to do. Unless we feel this weight of responsibility we get careless, we drift along, and as we sink lower and lower, from our professional plane, we lose the respect of the people, we are ridiculed; and, as an inevitable result, our profession is tainted, our professional calling is lowered, and the noblest mission of man sinks to a level with the rest of the world, and sells itself for money, and barter its choic-

* Read before the Military Tract Medical Association, at Bushnell, Ill., October 23.

est priveleges, even as a Jew barters his goods in the market-place.

But, realizing and feeling this responsibility, we are jealous of our professional honor, our efforts are directed to the good of our fellow-men, our banner is still furled on the heights where it was planted by Esculapius. The people trust and honor us; secrets are told and closeted skeletons are disclosed to us; facts, which, known to husbands, would ruin homes; truths, known to wives, would separate families, are known to us alone. We could destroy reputations, but we retain them; we could blast character, but we protect it. In short, our opportunities of benefitting mankind are unapproachable if we are true to our profession.

With these rambling remarks as a preface, I proceed to the subject in particular.

When a physician meets another physician in consultation, no matter how summoned, he becomes a consulting physician, and is controlled by definite rules of conduct as soon as he enters the house. He has been summoned for a specific object, and that object is to find out "what more can be done for that patient." The attending physician is baffled. The disease does not progress favorably. The patient does not respond to the treatment satisfactorily. He has turned the patient over a thousand times in his mind, and perhaps as many times in reality. Every symptom has been studied until it is almost set to music. Everything ever written pertaining to the case has been read, and every medicine ever prescribed has been given, and there the patient is—no better, and even now,

perhaps, getting ready to play on a golden harp. Family satisfied, perhaps, but wondering if something more could not be tried, and if you are not a bigoted fool you will wonder so too; and as you are at your rope's end you suggest counsel and get it. The consulting physician is decided upon and comes. Right here I may add, that you may have to have some doctor whom you consider not up to your standard of intelligence and experience (and that is always the case) but don't refuse to consult on that account. Perchance, the only one you can get, or the one the family suggests, is a young doctor, but don't refuse either on that account. You may get awfully fooled on some young doctor, strange as that may seem. Remember, "Thou hast hid these things from the wise and prudent and hast revealed them unto babes."—Matthew: xi, 25. Gentlemen, there is scripture for it.

The consulting physician should enter the sick room unprejudiced and free from influences which tend to turn his own original thoughts into the well-worn channel of some other brain. For this reason I deprecate any private conversation between the physicians before the sick room is visited. The sick room is entered, and then all the attention and thought of the consultant should be concentrated on the patient. His duty to the patient, I hold, is paramount to all others; nothing should prevent him from performing this duty above all others. If he allows his regard for the attending physician to change his views without being convinced of the wisdom of the change, he is doing an injustice to the patient first, to the family next and

to the doctor lastly, and the consultation falls far short of its purpose. He must make a careful and thorough examination of the case, asking any question he desires, and learning all he can from the physician in charge.

The history of the case he gets from the doctor, the present condition he learns for himself. When he has completed his investigations to his own satisfaction, he is ready to talk the case over in private with the attending physician. The utmost frankness must prevail in this conversation—everything brought out and held up to the light; the knotty points taken up and disposed of, and I hold that it is the imperative duty of the consultant to advise changes if he honestly believes the changes would benefit the patient. Nothing is so unsatisfactory as to have a doctor tell you, "Oh, you are all right; go ahead." Yet in ninety cases out of a hundred this is the substance of the consulting physician's advice. He is so anxious to appear fraternal that he never disagrees, never changes. That kind of a physician is not worth as much in a consultation room as the twentieth dilution of quinine is in malaria, given in drop doses once a week. Yet he is the most popular kind of to-day. It seems to me that when a physician gets the name now-a-days of being so fraternal that he always agrees, he becomes popular as a consulting physician.

It is his duty to suggest changes. He is there for that purpose. The attendant is not satisfied with the present treatment or he would not have been sent for, (there is one exception here, viz: Where the family are dissatisfied and demand counsel contrary to the attend-

ant's wishes), and a suggestion, no matter how small and apparently worthless is sometimes most valuable, as it may bring out a chain of thought which, when concluded, is the very thing overlooked. I had a case in my own practice. To illustrate:

A frail child, aged 11, visited our town from Iowa last May. Weather chilly and while on the cars took a severe cold. Reached Kewanee on Tuesday, and on that night she was seized with a severe chill and vomiting. I was called in by same unexplainable reason the next morning, and found her in the first stages of pneumonia. The usual pneumonic symptoms were all quite pronounced, but these were altogether secondary to the severe vomiting. Nothing could be retained on her stomach—no nourishment, no medicine, not even water. I knew that here was a self-limiting disease, and if I could support the powers of life until the disease had expended itself, my patient would recover. But how could I support when I had no stomach to assist me? In my dilemma I happened to remember that there were two ends to a person, so I used injections of egg-nog and quinine. In about two days that end went back on me, so I tried the skin and found that, too, "a la homœopathic," and she kept sinking lower and lower. I asked for counsel, and an M. D. came and advised enemas. Told him she had had them, and while we sat there scratching our heads, I happened to think, "Why couldn't I plug her up after giving her an injection and compel the enema to remain?" I thought that if I could keep her bowel well supplied with nourishment, she might absorb enough to maintain life, especially if the

nourishment was retained. It was a straw, but I grabbed it. Every four hours she got an enema, and after injecting I had the mother insert her thumb and hold it there and not pull it out until she got another thumb to put in. I allowed the bowel to empty twice a day. That patient got well.

So, many times when the consulting physician may not present any new idea, he might shake up the attendant's mind, which results in the right idea being brought forth, and thus it answers the same purpose. It is the suggestions that are needed, no matter from whom they come.

The changes in treatment should not be so rapid and pronounced that the attending physician loses in the least the confidence of his patient. I believe a treatment can be completely changed and no one but the doctors cognizant of the fact. Be cautious and gradual and feel your way. It is safer and no confidence is lost. I may sum up the idea of the duty to the attending physician in words somewhat peculiar: "Treat every attending physician like you would like every consulting physician to treat you."

The consulting physician's duty to the family and friends is to be honest in your prognosis. Many times the truth is not best to be known by the patient, but when it will not be conveyed to him, I see no reason why the family should not know it. But in this matter we must be governed by the particular case.

The remarks to the family should always be favorable to the physician in charge. Don't lie, but keep any unfavorable facts hid. The freedom of your tongue is prohibited again as soon as the private council is ended, and the duty to the family does not conflict with your duty to the attendant.

Never visit the family the second time to eat crow and tell them, if the patient dies, that if they had sent for you in the first place you could have saved it.

The Delaware whipping post is too good for the doctor who will say one thing to the patient's family in the attendant physician's presence and in his absence say another thing. He proves himself a liar and hypocrite, and no words are strong enough to express his despicable character.

HYPODERMIC INJECTIONS OF ERGOT IN FACIAL NEURALGIA.

BY J. T. STEWART, M. D., PEORIA, ILL.

I see in the MEDICAL MONTHLY of December, 1888, an article entitled, "Aconitum in Trigeminal Neuralgia," by J. G. Tayler, M. D., of Ashton, Ill., and an article entitled, "The Uses of Gelsemium," by G. F. Schreiber, M. D., of West Brooklyn, Ill.

From the latter I take the following

extract: "For the relief of pain of all the neuralgias it is the drug *per se*, and should be administered in ten to fifteen drop doses, combined, if need be, with minute doses of morphine. For neuralgia of the fifth pair of nerves, pleurodynia, and similar conditions, it is an excellent remedy."

I admit that both these drugs are valuable remedies for many things, and both of them have more or less influence in controlling neuralgia, especially has aconite. Gelsemium I have had a large experience with in neuralgias, but abandoned it for that purpose thirty years ago.

My reason for abandoning it in neuralgias was, that its action was unsatisfactory. I could rarely obtain decided relief with it from the neuralgia until I obtained its physiological effects, and they are quite unpleasant, so much so that my patients preferred the neuralgia to the effects of the remedy.

For neuralgias, generally, I think aconite much more reliable and better.

But my object in writing this is to say, that for the relief of facial neuralgia hypodermic injections of ergot are incomparably superior to aconite or gelsemium either. Any one who has used it will never resort to either of the above-named remedies. I have used it the last six years and have never had it fail in but one case. In that case there was evidently organic disease. Ordinarily one injection relieves the pain permanently. Sometimes two, and in one very severe and obstinate case which had gone through the hands of several physicians without relief, it required three. After the third

injection he never had a twinge of pain. I put it in the temple, as nearly over the seat of pain as convenient. I use the plain extract, and have it made on purpose for hypodermic use. One minum represents two grains of ergot. Of this I use from eight to twelve minims, blood-warm, at one injection, and without diluting.

In order to make this a success, *two things are essential*. One is, to have a fresh and pure article of ergot to make the extract from, and the other is, to have the extract reasonably fresh. If kept long, it is not only worthless, but irritating. When properly prepared and fresh, it produces more or less pain for ten or fifteen minutes, and when the pain from the injection subsides the neuralgia is usually gone, and does not return. I sent a short notice of this treatment of facial neuralgia to the Therapeutic Gazette two or three years ago, which was published, but in it I did not insist on the necessity of using a fresh and pure article, and I fear on that account some may have been disappointed in its use.

Peter Bourscheidt, an apothecary of this city, keeps on hand a reliable preparation.

I have used this treatment for sciatica and other forms of neuralgia, but not with very satisfactory results.

PROGRESSIVE MUSCULAR ATROPHY.

DaCosta states that the treatment of this affection should be directed to producing alterative effects on the central parts of the nervous system envolved. With that object the preparations of

mercury and iodine were indicated; but in a case before his clinic, DaCosta prescribed five minims of Fowler's solution with a tablespoonful of cod-liver oil after each meal.

SELECTED ARTICLES.

NEW SPLINT FOR ARM AND HAND.

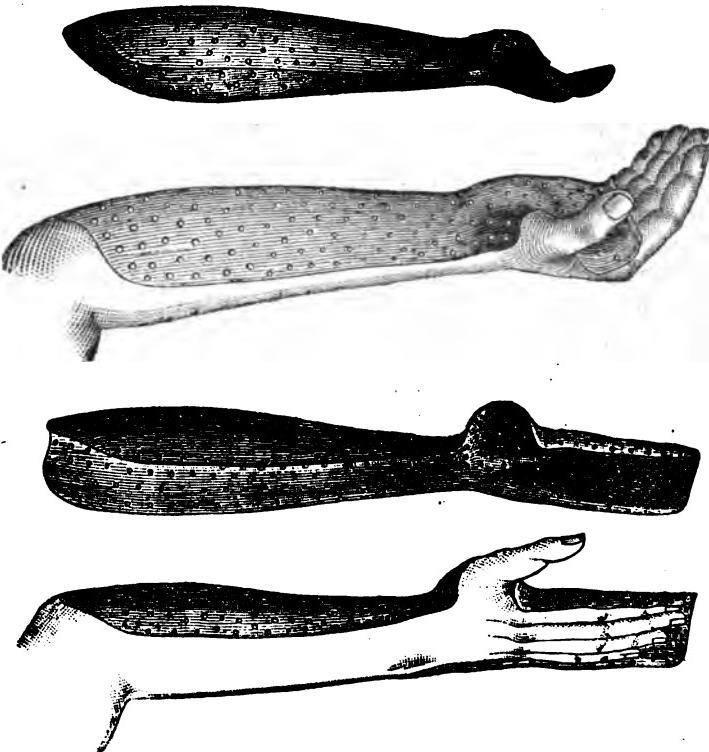
J. F. BALDWIN, M. D., COLUMBUS, OHIO.

For several years I have used with much satisfaction, for fractures of the fore-arm, especially Colle's, the metallic splint devised by the distinguished surgeon, Dr. R. J. Levis, of Philadelphia.

Recently my attention has been called to a splint made of the same ma-

It retains the member in its correct and normal position. Being of sheet copper, these splints can be easily shaped to suit the individual peculiarities of form.

The splints are made in two forms, as shown in the cuts, one for the fore-arm alone, and one for use where it is



terial—viz: sheet copper, perforated and nickel-plated—but having an improved shape. This splint I have used in two cases; one a Colles' fracture, the other a double fracture of the radius near its middle. In both these cases it answered admirably. I am now using it on a second case of Colles' fracture. The patients find it light and easy, while it attracts no attention from its bulk, like the ordinary wood splint.

desired to fix the hand also. They are made in two sizes, for adults and children, and are rights and lefts. Eight pieces constitute a full set. The price of each piece is one dollar. They are made by the J. Ellwood Lee Co., of Conshohocken, Pa.

In using these, or other splints, I am in the habit of lining the splint with a thick layer of *absorbent wool*. This wool is free from grease or impurities,

is soft, and is eminently elastic, even when wet. This last quality renders it very much superior to cotton, as it allows of the occurrence of a considerable degree of swelling of the injured

part without the bandages becoming uncomfortably tight, while the elastic pressure tends to reduce any swelling that has already occurred.—*Columbus Med. Jour.*

NOTES ON THE TREATMENT OF ACUTE CORYZA.

BY FRANK POTTER, M. D., BUFFALO, N. Y.

This subject perforse divides itself at once into (1) Preventive Measures, and (2) Remedial Measures. We will consider the preventive measures first. It may be safely asserted that the majority of colds need not occur, even in an uncertain and changing climate like ours, if people would understand and practice a few simple hygienic precautions. We cannot expect to discuss every hygienic rule in detail that would apply to each particular case, but we hope to present certain general principles which can be elaborated or reduced according to the needs of the individual.

Your attention is first directed to a custom, that may be called almost a natural one, and which we consider to be very pernicious. I refer to the habit of sleeping with the windows open at night when the external temperature is below a certain point. This custom is practically universal in this country, and is an important factor in accounting for the frequency among us of the catarrhal diseases of the upper air-passages. I fail to find, either by observation or investigation, that any other people living in our latitude indulge in this custom. The people of Europe are very careful to prevent the external night air from entering their sleeping apartments. Their windows are double, and usually you will find a closed stove or fire-box in the same room; and, in many other ways, their houses are not as well ventilated as ours.

We can derive many hints from the customs of the lower animals upon this

subject. They seek to render the air, when sleeping, as warm as possible in various ways. When the temperature is below that of their bodies, they seek their dens, huddle together, or curl up so that the nose is placed close to the body. The birds even, whose native element is the air, when sleeping hide their heads beneath their wings or under their breasts. Instinctively they seem to appreciate that the body is in a state of least resistance during sleep, and that the air they then breathe should be properly warmed so as not to act as an irritant to the delicate lung structure.

Besides the suggestions just made, the reasons for greater care at night or during sleep are not difficult to understand. We remove our warm clothing and put on that which is much lighter. We are not sure on retiring that the temperature will not be twenty degrees, or more, lower in the morning. A slight restlessness will expose a part of the body to rapid cooling, which generally leads to the development of a cold.

Again, the air must reach the lungs sufficiently moist and warm, or else it will act as an irritant and cause trouble. The nose is the organ where this is accomplished, but it is limited in its ability, and cannot raise the temperature of the air beyond a certain point. According to the experiments of Aschenbrandt, and Kayser, the inspired air in passing through the nose can be raised about 40° F., but no more. These experiments are quoted at length

by Bosworth, as confirmatory of his views on the physiology of the nose, first stated in a paper read before the American Climatological Association in 1885, and entitled, "Hay Fever, Asthma, and Allied Affections."

It is, of course, not unreasonable to conclude that when all the vital processes are in a state of least activity, as, during sleep, the inspired air would not be raised even as many as forty degrees, though no experiments have been made in demonstration of this. Formulating a rule, however, on the basis of these facts, we can say that when the external temperature is below 65° F. at nine o'clock in the evening, the windows of all sleeping apartments should be closed. This is the advice I have been accustomed to give patients for some time past, and it certainly has been a factor not only in relieving the chronic conditions, but in the prevention of fresh acute attacks of inflammation of the upper air-passages. They will tell you they are much more comfortable on rising in the morning; the throat is less rough; there is less cough and less discharge. I believe that if this rule were universally followed, "catarrh" would not be as frequent as it is. This part of the question may be concluded with a quotation from a paper by Dr. J. B. Johnson, of Washington, on this subject: "Even the most robust, who sleep in the open air, frequently awake in the morning with a husky voice, dry nostrils, pains in the limbs, and uncomfortable feelings about the chest, to tell them that they took cold during the night, and to warn them against the risk and imprudence of letting the external air too freely into their sleeping-rooms at night."

Another hygienic measure of importance, especially to those who are catarrhally disposed, is the taking of a cold bath the first thing on rising in the morning. The room in which the bath is taken should be warm, and if a bathroom is convenient, the water should

be drawn and allowed to stand in the tub over night. It should be taken rapidly, so that the whole body will glow afterwards. It acts as a tonic to the nervous system through the medium of the cutaneous nerves; and it serves, especially, to toughen such sensitive areas as the feet, the back of the neck, and between the shoulders. Occasionally we find a person unable to bear the slight shock of the cold water, and in that case it must be abandoned.

The subject of the proper amount of clothing is an important one, but without discussing each article in detail, it will suffice to call attention to the general rule in regard to it, viz., no part of the body should be under-clothed or over-clothed. In our climate, this requires some little care and forethought. It is manifestly improper to wear a sealskin sacque, and at the same time cover the feet only with silk stockings and thin shoes, and expect to avoid taking cold. It is said that many deaths can be attributed every year to the sealskin sacque. Its wearers seldom remove it upon going indoors on their social visits, and have been known to remain in an over-heated room for an hour or more with it on, thus producing more or less perspiration and consequent rapid chilling of some surface of the body on returning to the outside air. That the outer wraps should always be removed upon going indoors, is like stating a truism, but how often do you see it violated not only by the wearers of sealskin sacques, but by the wearers of overcoats as well.

Another article may require a few words. The neck-scarf is generally considered unnecessary and dangerous, and we find much advice against its use. It would seem, however, that it is the abuse, not the use, of it that is dangerous. There are many people to whom it is a necessity, and the danger to them consists in not wearing it. They should be advised that it should be worn according to the temperature

of the day. On the sudden warm days of winter, when it would produce perspiration, it may be turned back or carried in the pocket, to be assumed again when the temperature falls. To leave it off on a cold day because you are going merely a short distance, is as careless as to stand talking with a departing guest on the front porch without your hat. In short, when worn it must be with judgment. Carelessness is always fruitful of disaster. Another question of importance is the presence of any chronic disease of the nose or throat. We find that people so afflicted are, as a general rule, subject to acute attacks even from slight exposure. It is, therefore, a measure of prevention to treat any chronic disease of these parts. Of course, a complete discussion of what this treatment should be is not within the province of this paper. Attention, however, is earnestly directed to this subject, for I believe repeated acute attacks of coryza are merely symptomatic of some chronic fault, to which our investigations should be directed. To be sure, this supposes that ordinary care has been taken to avoid any exposure liable to develop the acute form of the disease.

If now, from neglect of all precaution, or in spite of the greatest care, a cold is developed, how shall it be treated? This brings us to the second part of the paper, viz.: Remedial measures. If the cold comes on toward evening, a hot bath should be taken, followed by the exhibition of $\frac{1}{16}$ to $\frac{1}{8}$ of a grain of sulphate of atropia, and the patient well wrapped up in bed. A word of caution is necessary in regard to the use of the atropia. Some people are very susceptible to its influence, and when given for the first time a much smaller dose must be used—say $\frac{1}{100}$ to $\frac{1}{50}$ of a grain. When found to disagree, a full dose of the sulphate of quinine, about ten grains, may be substituted. During the next day the nose and upper part of throat should be

thoroughly washed out with a warm alkaline spray; or, still better, with a douche, by means of the posterior nasal syringe; the turgescence of the nasal tissues contracted by means of cocaine; and, finally, the entire surface covered with coating of an unirritating oil. The *oleum petrolina* we have found to be the best for this purpose. This should be done about three times in the course of the day. If the cold is first noticed in the morning, the process should be reversed; the local treatment given during the day and the general treatment at night. From experience we are able to report that, by this method, colds that generally last from ten days to two weeks can be limited to about two days. The discomfort after that is so very slight as not to be considered. We do not propose this as an infallible method, but where it fails it will usually be found that there is intra-nasal chronic disease, or else some constitutional disorder which makes the attack of extraordinary obstinacy.

Lately, and while this paper was preparing, Dr. F. Cardone, of Naples, has contended for the parasitic nature of acute coryza, stating that its morbid process is analogous to that of pneumonia. He has found in the secretions the *streptococcus pyogenes*, the *staphylococcus aureus et albus*, and, in still greater numbers, the *diplococcus* of Fraenkel and the *pneumococcus* of Friedlander. If he is correct, we can, perhaps, understand the great benefit resulting from the early and continued cleaning of the parts, such as the above treatment advocates. On the other hand, if a cold is caused by the paresis of the nerve-centers governing the vaso-motor phonomena of the upper air-tract, we can also understand how the counter-shock of the hot bath and atropia treatment, together with local depletion, so rapidly subdues the inflammatory action and restores the patient to accustomed health.—*Buffalo Med. and Surg. Journal.*

THE TREATMENT OF CATARRHAL PNEUMONIA IN CHILDREN.

BY ROBERT C. KENNER, A. M., M. D., LOUISVILLE, KY.

It is important that the sick room should be lighted and properly ventilated. Juergensen says: "In my opinion, patients who are exposed to the light make the best recovery," and the evidence of the prejudicial effect of dark rooms is abundant in the writings of all good observers. The light should not fall in the face of the patient, but the bed should be placed in such a manner that without annoying him, he can obtain its tonic and cheering influences. The temperature of the room should not be allowed to fall below 60° F., or to rise above 65° F. A thermometer should be hung up in the room and strict attention given to this matter. When it rises above this, the top of one or two windows can be lowered and the temperature in this way be reduced to the desired point. I find it often serviceable to leave the top of a window permanently down, but the same purpose can be secured frequently by leaving open a door which does not directly communicate with the external air.

No one will deny the importance of having our patient kept in a moist atmosphere. This is of special importance early in the disease. I usually secure the degree of atmospheric moisture desired, by having tin tubes made to fit the mouth of an ordinary sized tea-kettle, and several feet in length, so they will extend from the grate or stove well up into the room. These can be removed when there is a greater amount of moisture than is desirable, and the steam escape up the chimney. Juergensen recommends making a hut of the bed by putting bed clothes around it and having the mouths of several tea-kettles heated by spirit lamps placed so they would pour out steam in sufficient quantity to fill the hut. I am accustomed to use this, but in a manner somewhat different, and do not keep the patient

continually in it. I have the bed brought near enough the fire to have the tin tubes already described to go between the folds of the covering. This supplies the steam much better and does away with the unpleasant odor that is given off by the spirit lamps. I generally have the patient put in the hut every two, three, or for hours as occasion may seem to require, and allowed to remain in as dense a steam atmosphere as is compatible with tolerable comfort for from ten to thirty minutes. This has a very beneficial effect on the bronchitis, and in mild catarrhs Juergensen has seen it have an abortive effect.

The patient, to prevent hypostasis and collapse, should not be allowed to lie on his back long at a time. The bed clothes should be suited to the needs of the patient. Often young children will not remain in bed, and the nurse will have to keep them for a large part of the time in her arms. In these instances it is important to caution them against permitting the feet to be exposed. Attention to all these details is of the utmost importance, and failure to observe them is often followed by increase in severity of the symptoms, and relapse in cases where convalescence was established.

The chest of the little patient should be encased in cotton batting and this covered with oil silk or flannel. This affords a needed protection to the chest and at the same time adds to the comfort of the patient. I have made these so they can be easily opened to allow the application of turpentine liniment. This liniment acts as an excellent counterirritant and respiratory stimulant, and I am sure its use has contributed to the successful issue of many cases. Poultices are often harmful. Especially is this so when we have not a careful nurse, or where they cannot be kept continu-

ally warm. Blisters are a great source of annoyance, and capable of rendering us very little service in this disease in children.

Supportive measures are of the most important indications in the treatment of "Catarrhal Pneumonia in Children." Nutritious food taken with regularity and the maintenance of a normal condition of the alimentary canal are two of the most certain means of supporting our patients. I have found Juergensen was largely correct when he said that the mouth and teeth being filthy went a long way toward destroying the appetite, and, therefore, recommend that the mouth and teeth be looked after and thoroughly cleansed. Many weaned children will not take milk unless it is forced upon them, yet they can be induced to take some other fluid nourishment. Many of the infant foods, such as Carnick's food, will serve us well here. Physicians find that particular cases require special indications in this regard, and that while some children cannot be induced to take milk, they will drink beef tea with relish. One indication I have come to look upon as important, is that throughout the disease pepsin in some form should be given after each taking of food. The digestive powers are weakened and the pepsin in assisting digestion has many times, I think, prevented the establishment of intestinal catarrh, which not infrequently is produced by the presence of indigested food. The pepsin, I usually give in doses (lactopeptine) of five grains every six hours, to a child five or six years old. Milk, which is the most valuable single article of diet, can be given after being treated with Fairchild's Peptogenic powder. When this is the only article of food, and powder is used, no pepsin need be taken. The soluble Beef Peptonoids are valuable in sustaining the strength, and I use it constantly.

The use of stimulants is indicated in nearly all cases. Their use is called for

in such quantities and at such intervals as will give the weak pulse more volume and aid in lowering the number of respirations. It is my practice to begin the use of stimulants when I first see the patient and insist on their continued use. I am satisfied that by this means I have frequently prevented many cases of respiratory and cardiac failure. The amount and the frequency of the administration will depend on the urgency of the cardiac and respiratory symptoms. Juergensen in this connection well says: "To lay down a set of rules for the administration of stimulants would be a very thankless task. Let the principles of treatment be mastered, and then quiet observation at the bedside will give one the experience which inspires confidence. A timely attention to the therapeutics of cardiac symptoms generally makes the use of heavy artillery unnecessary, but if we are obliged to bring this into the field, it should be borne in mind that it is unnecessary to place any limit to the dose of stimulants; if the weaker stimulants fail, we may use the stronger, and increase dose. In such cases the only limit is consistency; whoever is timid when this is at stake, really belongs elsewhere than at the bedside." All practitioners meet some exceedingly mild cases which might go on without them, but I have no doubt that all cases are substantially benefitted by stimulants. A point which I believe cannot be too fully enlarged upon, is that stimulants should be given frequently. Every two, three or four hours is not, I think, often enough. The effect of a dose of alcohol will wear off in an hour or so, and by giving it every hour as the longest interval, we may keep up its good effects. I withdraw stimulants only when resolution is established and convalescence is progressive and sure.

The fever certainly increases the weakness of the heart and interferes with proper oxygenation of the blood by the superficial respiration which ac-

companies each rise of temperature. Juergensen recommends a bath of moderate temperature followed by cold effusions. There are few advocates of this method now, and there are many able physicians who regard it as positively dangerous. My use of his methods was not attended by any fatal results, but they were not on a large enough scale to determine its value for myself. I generally give children five years old from twelve to thirty grains of quinine in twenty-four hours during the continuance of the fever. This is given in from one to three grains at a dose in arom syrup yerba santa, every two or three hours. It generally reduces the fever to a considerable extent, and exerts a tonic, and I believe curative influence on the disease. I fully agree with Prof. Loomis when he says: "The drug which has most power in reducing temperature and combatting asthenia is the sulphate of quinine, which may be given in full doses during the period of the fever, and as an aid to resolution it is most serviceable during the active period of the disease." There are certain cases in which there will be an afternoon rise of one or two degrees of temperature for some days after the active symptoms of the disease have disappeared. This will continue for several days or a week, when the most careful examination can find no pulmonary lesion sufficient to account for it. In these cases I have succeeded in stopping these elevations and establishing convalescence, by the administration, two hours before the time of the exacerbation, of from ten to fifteen grains of quinine, in one or two doses. In one case which occurred in my practice last winter, a cure was brought about by this means in a case where the temperature arose to 102.5 F. each afternoon, and convalescence followed upon the disappearance of the afternoon exacerbation. There will be some cases in which quinine will fail to exert much antipyretic influence, and in these anti-

febrin in doses of two or three grains to a child five year old, every six hours (without stopping the quinine), will frequently answer our purpose. But I am by no means in favor of using antipyretic drugs in all diseases in which we have elevated temperature. But there is little doubt that they frequently produce excellent results. When the temperature in spite of quinine given as above indicated the thermometer in the axilla registers from 104 to 105 F., there is no doubt but what antifebrin serves us well. It will bring down the temperature to normal in an hour, and the breathing which was before superficial will become more profound, while the body will be bathed in perspiration and the sedative influence of the drug induces as a rule a sound sleep. I have never seen any bad effects from its use in the way of producing weakness of the heart and because the dose is smaller and its action more certain, I prefer it to antipyrin.

There is much good to result from the regular administration of diaphoretic mixtures. It is a good idea to give from the beginning a diaphoretic mixture every two or three hours, or often enough to secure proper action of the skin. This mixture often serves us well:

R.	Syr. Ipecac.	
	Syr. Senegæ	aa $\frac{1}{2}$ ounce
	Syr. Tolutan	1 ounce
	Amomon. Carbon	16 grains
	Msce.	

Teaspoonful every two hours, or as often as necessary. When the kidneys are not acting properly the potash, acet., can be added to this formula. This mixture exerts a beneficial influence on the cough, making it looser. I have continued with this as long as the cough is present. When it is quite annoying paregoric may be added to the mixture, but I never do this when the secretion of mucus is tenacious or there is any tendency to choking up of the tubes. When the opium is contraindicated or we feel in doubt as to the propriety of giving it, I have found Steiner's sug-

gestion as to the use of belladonna quite useful. There will be many cases in which the mucus will be quite tenacious and threaten extensive pulmonary collapse. In these cases a sufficient emetic will relieve the symptoms, the act of vomiting causing the dislodgement of the mucus. It is a matter of importance to use some emetic which will exert no depressing effect on the system. Ipecac in my hands has sometimes produced prolonged emesis and considerable depression. I prefer to use Dr. Meig's Croup Emetic, which, all remember, consists of three drachms of alum rubbed in an ounce of clarified honey and given in table-spoonful doses until free emesis is produced. On the first appearance of this collection of tenaceous mucus in the tubes, I order this remedy and have it kept in readiness for emergencies.

When the respiratory function is flagging and alcoholic stimulants and the carbonate of ammonia which I give with the cough mixture seemingly does little good, I have found strychnia to yield brilliant results. The use of digitalis is in most cases altogether uncalled for. And if stimulants have been used properly we shall have generally little demand for it. Yet occasionally in cases of long duration the infusion will serve us well, and sometimes be indispensable. The carbon of ammonia is an excellent cardiac stimulant, and should be given regularly, not only for this effect, but also for its expectorant and diaphoretic powers. I am in the habit of combining it with my cough mixture and of giving one or two grains to a child three to five years old every two hours. Ofttimes we can give liq. acet. ammon. with more convenience. Especially is this the case when we think it will supply all the indications of a cough and diaphoretic medicine in the case with which we have now to deal.

I have never been successful in con-

trolling the diarrhoea by small doses of calomel, as some authors claim to have done. It has frequently proved harmful in my hands. Especially was this the case when it was given in large doses or of sufficient size to produce the characteristic neutral stools. In the incipiency of the diarrhoea nothing is so good as a dose of castor oil. When this fails to relieve, a small dose of laudanum will often act as happily as we could wish. But still we will have occasionally to resort to astringents. Before using them it is best to try the amon. syr. of rheubarb. When extreme irritability taxes the system, the use of bromide of potassium will often relieve the trouble. But we may frequently induce sleep by a full dose of whisky. But there will be cases in which despite whatever bad effect it may have on the cough, we will have to give some form of opium. Dover's powder is the least objectionable drug under the circumstances. The syrup of Dover is generally the most convenient manner of its exhibition to children.

When it can be done without subjecting our patient to the danger of catching cold, a sponging of the body with warm water is attended with good results. It induces free diaphoresis and generally causes the patient to fall into a placid slumber. Convulsions, delirium symptoms referable to the cerebrum often demand our attention. Trousseau has found musk to be most valuable in those cases where the nervous symptoms were out of proportion to other elements of the disease. The ordinary treatment for convulsions serves here. Those due to the violence of pneumonic poison are in most cases irremediable; especially if they appear early in the disease is this the case.

Convalescence must be watched with the greatest care. Tonic and careful attention to diet and clothing must not be lost sight of.—*New England Med. Monthly*.

FOOD FOR THE SICK.

BY MRS. S. T. RORER, PRINCIPAL OF THE PHILADELPHIA COOKING SCHOOL.

Milk is by far the most important food which we have to give the sick, as it contains all the substances necessary for the support of the human body. No doubt many of the recipes which I shall speak of are well known; still those who attempt to follow them often fail from lack of attention to small details; so I would emphasize the importance of following the directions which I shall give explicitly, and especially of being sure to measure each ingredient used.

A doctor will rarely be called upon to make these articles; but it is of the greatest importance for him to know exactly how to direct the person in attendance to prepare the food, and when prepared to be able to tell that it is made as desired. Where there is only one sick person to be provided for, it is wise to prepare small quantities of any food at one time, and in serving to be sure to have the food either hot or cold, and never lukewarm. When prepared, the same food should be presented at different times in different dishes, and uneaten food should never be allowed to remain in the sight of the patient.

Barley water.—Barley water is best prepared by taking one ounce of barley and covering it with one quart of boiling water; it is then to be boiled rapidly five minutes, and the water thrown away, as it has objectionable color. Add a first boiled water—by this I mean water which has just come to the boiling point, and not that which has been drawn from the hot water faucet, or that which has been boiling on the fire for hours at a time. A first boiled water is cold water which has been heated rapidly until it boils and has not parted with its gases. Let the pot in which the barley and water have been placed simmer, not boil, gently

two hours, strain, and it is ready for use.

Two-thirds of milk and one-third of barley water prepared in the above manner, make a most acceptable food, especially in typhoid fever, where we desire some starchy food.

Koumiss.—For koumiss mixed milk is the best, Alderney milk being too rich. Put one quart of sweet milk into a farina-boiler, and stir constantly (over the fire?) until it has reached blood heat. Dissolve one-quarter of a cake of compressed yeast in two tablespoonfuls of lukewarm water; stir the yeast until it is thoroughly dissolved. If you are unable to procure compressed yeast two tablespoonfuls of liquid yeast may be used. Take one ounce of sugar (which is equal to two tablespoonfuls of sugar level to the brim) and dissolve it in two tablespoonfuls of water; stir over the fire until it boils, and then allow it to boil ten seconds; when you should have a perfectly clear syrup. Put the yeast into the milk and then add the syrup, stirring backward and forward, until they are thoroughly mixed.

Fill a quart bottle up to the neck with the mixture, and put in a tight-fitting cork, which must be fastened down by means of a string; and keep the bottle in an upright position at a temperature of 70° F. for twelve hours; then in a temperature of 55° F., the bottle being placed on its side. The koumiss is ready for use in twenty-four hours; but patients often prefer it after standing forty-eight hours, as the taste is then slightly more acid.

Scalded Milk.—There is a great difference between scalded and boiled milk. If we place milk in a farina-boiler, no matter how hard we may boil the water underneath, the milk in the upper kettle will only be raised to

a temperature of about 204° F., and this is not enough to boil milk. Scalded milk is often much more acceptable to a patient and is not nearly as constituting as ordinary boiled milk. Put a quart of milk in a farina-boiler and as soon as a scum of coagulated albumen floats on the surface the milk is scalded. In boiling milk the casein which sinks to the bottom is apt to be burnt. I have known patients, who would become disgusted with boiled milk in a few days, to relish milk prepared in this way for months at a time.

Carrageen.—Take two pieces of Irish moss, thoroughly cleaned from any adherent sand and dirt, add some cold water, and let them soak five minutes; then wash, and allow to soak five minutes more in cold water, when the moss will have a soft, white look, and, having absorbed water, will be considerably increased in size. Scald one-half pint of milk, and, after shaking any adherent water from the moss, drop it into the farina-boiler. Stir well, and then cook, with the lid on the pot, for five minutes. Add one ounce of sugar. No flavoring extract is to be added unless especially ordered; but vanilla, wine, etc., may be added, or a sauce may be made and added to the jelly when cold. Strain through a sieve, and put into small moulds, which have been washed with cold water so as to prevent the jelly from adhering to the sides; then it is taken from the moulds and placed immediately on ice, or in a very cool place, and it will be ready for use in about one hour. It must be served very cold, or it will have a fishy taste. The quicker it is made, the better it is.

Milk punch.—Milk punch is made by taking two-thirds of a tumblerful of milk and one-half ounce of sugar, and adding the amount of spirits ordered. The whole must be thoroughly shaken, with or without ice, in a wide-mouthed bottle or a tin shaker; and then served in a clean tumbler. A little nutmeg

grated on the top makes the flavor more acceptable to some palates.

Egg-nog.—Egg-nog may be prepared with the whole egg, or with the yolk, or the white of the egg alone. If the whole egg is to be used, separate the white from the yolk and beat the white until it is light—not so dry a froth that it would stand alone. Then beat the yolk, and slowly add one-half cup of milk to it; put in some ice—not cracked too fine; add the white of the egg and one-half an ounce of sugar, and beat until well mixed. Then add whiskey or brandy in quantities required, mix again, and serve at once.

If the white alone be used, mix as if making milk punch, but add from one to one-half ounce sherry, as this removes the taste of the white of the egg better than brandy or whiskey. Shake the whole as for milk punch. If correctly made there will be but little froth, the whole being of a light consistency. If the yolk alone be used, beat the yolk and add the milk slowly, beating all the time. Then add the sugar, ice, and spirits, and shake well.

Milk gruel.—Scald one-half pint of milk; add six good-sized raisins; and allow to stand five minutes. Take a tablespoonful of corn-starch and thoroughly mix with two tablespoonfuls of cold milk. Add this mixture to the scalded milk quickly, stirring backward and forward over the fire in a farina-boiler until it begins to thicken; then add one ounce of sugar, and let it cook one minute. Strain, and place in moulds in a cool place.

Beef-tea.—Great care must be used in the selecting of meat for beef-tea, and that part of the meat is to be used which contains the greatest amount of nourishment. The piece best adapted for this is the “sticking-piece” (that part of the neck where the knife is thrust through in killing the animal), as here there is the greatest amount of blood in the part. The worst piece is the tenderloin. If the sticking-piece

cannot be obtained, take the round. It is indifferent whether you use the upper part, which is the tender part, or the under side.

Take one pound of meat which has been well freed from fat, and chop it as fine as possible; add one pint of *cold* water; stir well; and allow to stand in a cool place for two hours. The cold water is added to soften the fibres and extract the juices. If boiling water is added a film is coagulated on the outside, and no amount of boiling will make it tender or extract all the juices. Stir the beef-tea, as it is soaking, every little while. Put in a farina-boiler; but do not let it boil. For seasoning, it is better to add six whole peppers than the ordinary ground pepper. A bay-leaf imparts an agreeable flavor, and may often be added with no harm to the patient. Salt is to be added just before taking from the fire, because if it be added sooner the fibres are hardened and the juices are prevented from coming out. The fat that rises to the surface is to be removed with small pieces of white blotting paper. Keep stirring till the red color is changed to a slight white tinge, which will occur in about fifteen minutes. Then cover the kettle for a few moments and strain, pressing hard to get all the juices out.

It is wise to prepare beef-tea fresh every day, and never to hurry its preparation. Beef-tea is to be served icy cold or very hot; and to prevent the tea from cooling in being carried from the fire to the sickroom, it is wise to serve it in a metal tea pot, pouring the beef-tea into a cup only when the room is reached. Never warm up more than you intend to use, and any quantity left over must not be poured back into the remainder of the tea. The fibrin settles to the bottom, therefore, before re-warming, be sure that the vessel in which the beef-tea is kept is well shaken. When properly prepared, beef-tea should not have a cooked

taste, like a soup, but should taste more like rare meat.

Clarified Beef-tea..—Take the shell of one egg and crush it in small pieces; add the white and a little water and beat until well mixed. Allow the beef-tea, prepared in the manner stated above, to come to a boil, and then add the shell and white of the egg. Allow the mixture to boil in a covered vessel for two minutes, and strain; and the dark colored beef-tea has given place to a clear light straw-colored liquid. This liquid is very stimulating and should not be given in more than two ounce doses at a time, or it may lead to dangerous symptoms from over stimulation.

Mutton Broth..—Mutton is less nutritious than beef, but is more easily digested, and can often be given when the latter shou'd not be introduced into the system. The sticking-piece is the best part to use. Take one and one-half pounds of meat and one and one-half pints of water, and two tablespoonfuls of previously washed rice (if necessary the rice may be omitted) put on a slow fire, and allow to come to the boiling point; then remove any fat that may come to the surface, and allow to simmer for three hours. Keep the pan covered so as to prevent the evaporation of the water; strain, and re-warm as needed. Celery salt can often be added, and this imparts a nice flavor. The milky color is due to the rice.

Chicken Stock..—The legs and wings of the chicken make the best stock, as the sinews and bone in them contain gelatinous materials. The breast of the same fowl can often be saved and cooked for the patient in some other way. Take a one-pound chicken, which has been cut in large pieces, and the bones cracked, and one pint of water, and allow it to soak three-quarters of an hour. Then simmer in a closed pot for two hours. Salt and pepper are then to be added, and the whole

strained, and removed at once to a cold place. The fat is to be removed when cold, by a spoon. The solid stock as thus prepared can be used for food, or, by adding water and heating, and afterward cooling, it may be served as a drink, or it may be given warm, in the form of soup, with or without rice.

Wine Whey.—The caseine can be removed from milk by acids, such as lemon juice, tamarind juice, wine, etc. Take one-half pint of milk; raise it just to the boiling point; add one-half as much sherry or madeira; and remove it from the fire. Strain through a fine sieve or several thicknesses of cheese cloth. Do not squeeze, as all the curd must be removed—otherwise, it would be more indigestible than plain milk. Wine whey must not have too white a color, as this is a sign that the milk has boiled. Serve warm or cold, slightly seasoned.

Beef-tea with Yolk of an Egg.—Take one gill of clarified beef-tea, scalding hot, and thoroughly mix the yolk of an egg with a small amount of

the liquid; pour quickly back into the pot; stir; and serve at once.

Cream Beef-tea.—One of the nicest and most nutritious dishes for the sick that I know of is prepared as follows: To one ounce of well made beef-tea add an equal volume of barley-water; then heat, but do not boil the mixture. Add the whole to a half ounce of cream or to the yolk of one egg, stirring well. Heat for a minute, and serve at once.

Boiled Eggs.—To boil eggs so that they can be most easily digested, bring some water to the boiling point, drop the eggs in, and remove the vessel from the fire. Allow to stand five minutes, and when served the whites will be found cooked, but as soft as the yolk.

Scraped Beef.—Prepare two ounces of scraped beef by scraping a piece of beef in the direction of the fibres, and not across them. Put on a piece of bread one inch square, being sure that the meat is well pressed into the pores of the bread. Dust with salt, and toast both sides for a minute over a hot fire.—*Med. and Surg. Rep.*

SALOL IN DYSENTERY.

BY R. B. M'CALL, M. D., GEORGETOWN, OHIO.

Of late much has been said and written of the virtues of Salol in the treatment of diahrrea and dysentery, from which it might be inferred that a specific for these ailments has at last been found. The confident assurance of with which the claims of the new favorite have been urged, afforded me sufficient reason to make a trial of it when suitable opportunity was offered. I present the following notes:

Bobby H., a very delicate boy, five years of age, had for the first time frequent bloody stools on August 1st, for which parents gave home-made treatment. During the next three or four

days child's condition varied slightly, with, however an observable steady increase in the frequency of the dejections and an augmentation of the quantity of blood and nausea.

On the fifth day, I was requested to see the patient, whom I found reclining, restless and fretful, entirely disinclined to be amused. There was feverishness with slight elevation of temperature, pulse 130, eyes preternaturally bright, cheeks flushed, tongue red at tips and border, centrally heavily loaded with a yellow mushy coat, skin sallow and relaxed, muscles soft and wanting normal firmness, stomach perceptibly tender,

no bloat nor tenderness of abdomen. One evacuation examined by me was very large, contained about three or four ounces of mingled blood and mucus without a trace of fecal matter. This, I was told, was the general character, amount being variable, some almost entirely sanguinolent.

For the first two days the following was taken with manifest advantage:

R. Ext. Ergotæ fl $\frac{1}{2}$ ounce
Sig: Ten drops every three or four hours in little water.

Which was supplemented by a few drops of tinct. opii camph. given at brief intervals, to relieve pain, with:

R. Tinct. Aconiti Specif 5 drops
Aquaæ 4 ounces
M. Sig: Teaspoonful every two hours for its tranquilizing influences.

Number of stools diminished to less than one-half, their sanguinolent feature almost disappearing.

However, on account of delirium which it was thought was caused by the ergot, the medicine was discontinued, the opiate kept up, conjoined with subnit. bismuth:

R. Bismuth Subnit. 1 drachm
Div. in Chart. No. 12. Sig: One every three hours.

This seemed to have a good effect for a day or two, and I was congratulating myself on having made a permanent impression with the ergot, in which, however, I was doomed to disappointment, as the disease in all respects renewed its former activity. It should have been mentioned that on the withdrawal of the ergot, a dose of ol. ricini was given, which, after evacuating the bowels of a few small scybala, was followed by a suitable opiate. Small doses of calomel, guarded with Dover's powder, were given at long intervals with gratifying results. The formula used was this:

R. Hydrag. Sub Mur 1 grain
Pulv Opii et Ipecac 4 grains
M. et div. in chart. No. 4. Sig: One every five or six hours.

During the use of this combination evacuations assumed for a day and a

half an almost natural fecal appearance. Twice the tolerance for ipecac. in the following was ineffectually tried:

R. Pulv. Ipecac	1 grain
Bismuth. Subnit	1 drachm
M. et div. in chart. No. 12.	Sig: One every three hours.

- Nausea resulting, discontinued.

In short, I tried the methods of treatment which an experience of fifteen years has made familiar, and which for the most part had proved a fair success in the management of dysentery. Of course, I have given the merest outline, leaving many things pertinent which would too much extend the limits of this article to detail. Suffice to say, that I employed methods and means popularized by the approbation of the profession in general, but without avail.

I was in despair. The boy must die under popular plans of management. I resolved to essay salol. To my knowledge the drug had never been used in this city. I, therefore, took a few doses to satisfy myself of its genuineness and effects, and then commenced its use in accordance with the subjoined:

R. Salol	60 grains
Div. in pulv. 30.	Sig: One every three hours.

Followed, if there is pain, by:

R. Morph. Acetat	1 grain
Aquaæ	20 drachms.
M. Sig: One drachm,	repeated often enough to allay pain.

Sulphate of morphia or Dover's powder would doubtless answer the purpose as well. At the end of the first day there was evident improvement in the character of the evacuations and diminution of their number, temperature fell, pulse became slower, restlessness and fretfulness vanished as if by magic. After the second day the dose was increased. Improvement continued, fever disappearing entirely, tongue cleaning and appetite returning.

In all my experience I never saw the efficiency of a medicine so unmistakably portrayed by characteristic results, the effects following close in the wake of the cause. Dose for first two days was

two grains every three hours, increased to three grains, and continued at that as the maximum for three days longer, after which it was given for five days longer in diminishing quantities till left off.

In about ten days nearly 200 grains were taken by a child five years old, and that without the least sign of oppression, disturbance of any kind of stomach, heart or kidneys, or of brain or mind. I believe salol is perfectly safe to be used in suitable doses at any age,

and am persuaded from the above case and from a little experience in summer diarrheas, wherein its influence was unquestionably kindly and affective, that it is destined to be a valuable agent.

I am desirous to give it a trial in one of those cases of infants under two years of age where the almost countless stools, distressing and agonizing tenesmns, uncontrollable restlessness, insatiable thirst rapid emaciation, profound debility and early supervening coma, have well-nigh invariably been followed by dissolution.
—*Med. Brief.*

THE USE OF ALCOHOL IN MEDICINE.

According to Professor Binz, of Bonn, alcohol in small doses increases the arterial pressure; in large doses the opposite effect is produced. Alcohol increases the activity of the left ventricle of the heart, and diminishes the moments of rest, and increases the respiration. Alcohol in moderate doses is eliminated by the lungs and kidneys. Alcohol burns up into carbonic acid gas, and water taken into the system. This action produces heat, and is of value to temporarily stimulate and strengthen the system. Alcohol does not increase oxidation. Only such substances can be rightly considered as nutritives which promote the heat of the body without producing any injurious accompanying symptoms. It is known that alcohol in large doses increases the decomposition of albumen, and hence, in many cases of severe illness, tends to hasten the fatal result rather than retard it. Alcohol has the power to reduce the temperature of the body in certain conditions. Moderate doses which do not produce the least symptoms of intoxication will cause a fall in temperature of several

degrees. The habitual use of alcohol deadens the heat-reducing property until it becomes no longer observable. Narcotic doses of alcohol reduce the temperature several degrees, and this reduction remains for several hours. All the causes of this fall of temperature are not understood. One of them is an enlargement of blood vessels of the skin, and an increased radiation of heat. Alcohol seems to be a drug of great value in therapeutics, but it must be given with great discrimination. In a healthy man it is always an injurious drug. A habitual beer-drinker is as much an alchololist as a habitual whisky-drinker. It is the duty of physicians to support every effort to break up the indiscriminate use of alcohol as a beverage or medicine, and insist that it be used with therapeutical precision. These views were sustained by the members of the congress, and a general agreement was reached that all possible caution should be observed in the use of alcohol as a medicine, and its changing effects on different individuals.—*The Therapeutic Gazette.*

THE PEORIA MEDICAL MONTHLY.

TRANSCRIPT PUB. CO. PUBLISHERS.

THOMAS M. McILVAINE, A. M., M. D., EDITOR.

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EDITORIAL.

ABORTIONISTS IN CHICAGO.

The recent sensational articles published in the *Chicago Times* relative to the subject of Infanticide and the ease with which persons, both doctors and midwives, can be found, who, for a greater or less amount, can be induced to produce abortions, have been read with much interest by a large number of persons. Through the northwest it was popularly thought that such things were done to a large extent in Chicago, and, in fact, a great many girls have been sent to that city for the purpose of concealing their shame, but it was not supposed that the nefarious business of the abortionist was carried on so openly and boldly as has been shown to be the case by the *Times* exposure. Men are implicated whose names are widely known and who hitherto have been held above suspicion. What the result will be it is difficult to estimate. Some claim that it will only advertise to the outside world that such things are easily done in that city, and as soon as the subject is forgotten by the public

(which generally happens to be in about nine days), the abortionist will return to his devilish work with a large increase in the number of applicants for relief. Unless the aid of the law is invoked in the aid of morality, and a stern example be made of all those against whom any sufficient evidence can be procured, such we fear will be the case. It seems to us that prompt action on the part of the State Board of Health would assist in securing the needed reform. Should the Board revoke the certificate of any doctor or midwife against whom this charge could be proven, no judge would dare interfere or grant an injunction to stay their hands. Then, too the State's Attorney, and it is his sworn duty so to do, should exert every power at his command to bring the offenders to speedy justice. The profession in Chicago should demand that these things be done, and should not cease their efforts until they are done. It will not suffice in public estimation to expel a member from a medical

society, for any man against whom sufficient evidence of his work in producing abortions can be gathered to warrant his expulsion from a medical society should be prosecuted as a criminal. The work of reform must come from within the profession, and in this instance should be led by the State Board of Health and the various reputable medical societies in Chicago, else the public will believe that there is truth in what has been hinted at many times, and, indeed, printed: "That the rascal is the fellow who allows himself to be

found out," and that the majority of the profession are ready to do their dirty work if they are sure they will not be caught at it.

Chicago owes it to her fair fame and good name not to rest until the criminal abortionist is not permitted to carry on his work in her midst. We do not doubt but that more or less of this work is done in other cities, but the means taken in Chicago to stamp it out should be so prompt and radical as to make it easier for the other towns and cities to follow her good example.

BOOK NOTICES.

A PRACTICAL TREATISE ON HEADACHE, NEURALGIA, SLEEP AND ITS DERANGEMENTS, AND SPINAL IRRITATION. By LEONARD CORNING, M. A., M. D., Consultant in Nervous Diseases to St. Francis Hospital; Fellow of the New York Academy of Medicine; Member of the New York Neurological Society, etc. 8 vo., cloth, pp. 227. E. B. Treat, New York, 1888. \$2.75.

In this volume the author has undertaken the difficult task of explaining the nature of the treatment of those pains about the head, which constitute such a fruitful source of misery. Dr. Corning is eminently qualified for the work, and has long been known to the profession as a brilliant and indefatigable laborer in the cause of practical neurology. His contributions to neuro-therapeutics are among the most practical and suggestive additions which have been recorded during recent years. To rare powers of perception Dr. Corning unites, in an eminent degree, the faculty of imparting knowledge in an entertaining manner. His style is at once lucid and

forcible, not the least of his charms being the power to awaken thought as well as to impart information.

In all matters involving the treatment of pain Dr. Corning is an acknowledged authority, and the precepts which he inculcates are alike worthy of the physiologist and the accomplished physician.

The present treatise on "Headache and Neuralgia" is replete with suggestion and useful matter, and no thoughtful physician can fail to derive both inspiration and practical assistance from its perusal.

THE VEST POCKET ANATOMIST. (Founded upon "Gray.") By C. HENRI LEONARD, A. M., M. D., Professor of the Medical and Surgical Diseases of Women and Clinical Gynæcology in the Detroit College of Medicine. Fourteenth revised edition, containing 193 illustrations, "Dissection Hints" and Vesical Anatomy. Cloth, 12 mo., 304 pages; price, \$1.00 *Illustrated Medical Journal Co., Publishers, Detroit, Mich.*

The new fourteenth edition of this work has been increased in size by the addition of over 100 pages of text and 100 engravings. The page of the book has also been somewhat enlarged to accommodate better the engravings. The Brain and its Membranes, the Eye, Ear and Throat—in fact, the entire Viscera and the Generative Organs of both Sexes, forms the new subject matter in this edition. Besides being a very popular dissecting room companion for the practitioner, since the illustrations show at a glance (being photo-engraved from the English cuts of Gray) the positions of all the important blood vessels, nerves, muscles and viscera.

FAVORITE PRESCRIPTIONS OF DISTINGUISHED PRACTITIONERS, WITH NOTES ON TREATMENT. Compiled from the published writings or unpublished records of Drs. Fordyce Baker, Roberts Bartholow, Samuel D. Gross, Austin Flint, Alonzo Clark, Alfred L. Loomis, B. F. Bumstead, T. G. Thomas, H. C. Wood, Wm. Goodell, A. Jacobi, J. M. Fothergill, N. S. Davis, J. Marion-Sims, Wm. H. Byford, L. A. Duhring, F. O. Janeway, J. M. Da Costa, J. Solis Cohen, Meredith Clymer, J. Lewis Smith, W. H. Thomson, C. E. Brown-Sequard, M. A. Pallen, Geo. H. Fox, W. A. Hammond, E. C. Spitzka, etc., etc. By B. PALMER, A. M., M. D. New, Enlarged and revised edition, with blank pages interleaved in its several departments for regulating formulæ worth preserving. 8 vo., cloth, pp. 256. E. B. Treat, New York, 1888. \$2.75

The first edition of this handy volume met with such favorable reception that the author has greatly enlarged and completely revised this new edition. The blank pages for original or other

formulæ are a good feature, and will be appreciated.

THE PATHOLOGY AND TREATMENT OF DISPLACEMENTS OF THE UTERUS. By DR. B. S. SCHULTZE, Professor of Gynecology, Director of the Lying-in Institution, and of Gynecological Clinic in Jena. Translated from the German by JAMESON J. MACAN, M. A., M. R. C. S., Eng., and edited by ARTHUR V. MACAN, M. B. M. Ch., Master of the Rotunda Hospital, Dublin. With 120 Illustrations. 8 vo., cloth, pp. 378. D. Appleton & Co., New York, 1888.

American gynecologists will heartily welcome this translation of Professor Schultze's work on Uterine Displacements into the English language. The translation has been very well done, and the ideas of the author turned into good, easy English. The notes by the editor are valuable and well-timed. Dr. Schultze's pathology of uterine displacements was disputed and harshly criticized for some time after the publication of the original German edition, but time has softened this opposition, and it is now claimed that his views have been adopted by most of the leading gynecologists of Europe, and it is hoped by the editor that the English edition will have an equally good effect in England and America. The book was written primarily for the use of general practitioners, hence all unnecessary literature and argument has been omitted, and the author's views are given plainly and succinctly, while the cuts really illustrate as well as adorn. It's a book that will richly repay a careful study.

WOOD'S MEDICAL AND SURGICAL MONOGRAPHS, Consisting of original

treatises and complete reproductions in English of Books and Monograms selected from the latest literature of foreign countries with all illustrations. 8 vo., published monthly. Price, \$10.00 a year. Single copies, \$1. Wm. Wood & Co., New York, 1889.

The book before us is the initial or January number of this library, and contains *The Pedigree of Disease*, by Johnathan Hutchinson; *Common Diseases of the Skin*, by Robert M. Simon, and *Varieties and Treatment of Bronchitis*, by Dr. Ferrand. The idea is a good one, and will meet with a favorable reception, with this exception, viz: In translating French works into English, the translation is not complete, unless the French system of dosage or metric system is also translated into what the majority of American physicians are acquainted with.

The attempt to foist the metric system upon the American profession has practically died a-borning, and should be given up. At least one half of the American physicians will not buy a book with the formulæ given in a system with which they are not familiar, and the sooner publishers understand this fact the better it will be for all concerned.

The January number begins the ninth volume of that most excellent journal, *The Annals of Surgery*, edited by L. S. Pilcher, of Brooklyn, N. Y., and C. B. Keetley, of London, England, and published by J. H. Chambers & Co., of St. Louis, Mo. Each year makes two

large volumes of over 500 pages each, filled with the best of current surgical literature. The illustrations are one of the leading features of *The Annals*, and are frequent and very well executed. No one who does but a little surgery can afford to be without it.

ANNOUNCEMENT. — E. B. Treat, Publisher, 781 Broadway, New York, will publish early in 1889 the Seventh Annual Issue of the "Medical Annual," a *resume* in dictionary form, of New Remedies and New Treatment that have come to the knowledge of the Medical profession throughout the world in 1888. The editorial staff of the forthcoming volume will include articles or departments edited by Sir Morrell Mackenzie, M. D., (Laryngology), London; Jonathan Hutchinson, Jr., M. D., (Genito-Urinary Diseases), London; J. W. Taylor, M. D., (Gynecology), Birmingham; William Lang, M. D., Ophthalmologist, of London; James R. Leaming, M. D., (Heart and Lung), New York; Charles L. Dana, M. D., New York, (Neurologist), New York; H. D. Chapin, M. D., (Pediatrics), of New York, and others, comprising a list of twenty-three collaborators, widely known in Europe and America. In its enlarged and widened sphere it will take the name of "The International Medical Annual," and will be published in one octavo volume of about 600 Pages, at \$2.75, under copyright protection, and issued simultaneously in London and New York.

THE Cooper Medical College of San Francisco, this year graduated seven-

teen; the Medical Department of the University of California eighteen.

PERISCOPE.

MENINGOCELE; LIGATION AND REMOVAL OF SAC.—Dr. W. O. Roberts, Professor of the Principles and Practice of Surgery, University of Louisville, in communicating this case to the *American Practitioner and News*, Dec. 1, 1888, says that on March 19, 1888, he saw, with Dr. Milner, of Uniontown, a child five weeks old, who had a pendunculated tumor, about the size and very much the shape of a goose egg, situated just beneath the occipital protuberance. The history of the case was as follows: The growth was first noticed immediately after the birth of the baby. It was then about one-half its present size. When the child slept the tumor was much smaller; and would become suddenly greatly swollen and tense when it cried. The tumor had always been exceedingly sensitive to the touch, and the slightest pressure upon it caused the child to cry violently. In consequence, it had never been able to lie on its back. Dr. Milner was called in a few days before Dr. Roberts saw it, and tapped the growth and drew off a quantity of serous fluid slightly tinged with blood. This diminished the size, of course, but did not lessen the sensitiveness of the growth. He then advised that the child be brought to Louisville, where Dr. Roberts saw it with him. At the time of the latter's visit the child was asleep in its mother's lap, lying on its abdomen. Hanning from the occiput was a flabby tumor. Just as he touched the growth the child awoke, crying violently. There was an immediate and great distension of the tumor. The pedicle or attached portions measured five and the body of the tumor eight inches in circumference. The skin over the tumor was well covered with hair. Fluctuation was marked. There was no pulsation. The growth was unmistakably a meningocele.

As the growth was increasing rapidly in size, and as the sensitiveness had

not diminished a particle after Dr. Milner had partly drawn off the fluid, its removal was advised. The parents, having been fully advised of the nature of the affection and the danger of the operation, decided to have it performed. On the following day Dr. Roberts removed the tumor. An elliptical incision was made through the skin and fascia covering the neck of the sac. This was first carefully dissected, then transfixated and ligated close up to the edge of the opening in the skull with a double stout silk ligature, and the tumor cut through in front of the ligature. As the ligature was tightened the child had a slight convulsion. When the tumor was opened, nearly three ounces of a slightly bloody serous fluid escaped. The cyst was sacculated. There were three sacculi connected with the main cavity of the cyst. No brain substance was found in it. The opening in the skull was just below the occipital protuberance, and was about an inch in its vertical, and half an inch in its transverse diameter. The ends of the ligature around the neck of the sac were cut short, and the integuments then brought together, provision being made for drainage. The operation was done under strict antiseptic precautions. Recovery took place without an untoward symptom. At the end of ten days the wound had healed, and the child was taken to its home. Three months after the operation the child was reported to be in perfect health, with no recurrence of the tumor.—*Med. and Surg. Rep.*

PROTECTION FOR AMERICAN PHYSICIANS.—Recently actors of the second and third grade have expressed a desire to be protected from the cheaper and perhaps better English article by a non-importation act; for "professional actors" are excluded from the operations of the present law. This actors' movement has struck the average pub-

lic as absurd, but it is capped by the New York *Medical Record*, which in its issue of December 29 devotes its leading editorial to an earnest plea for protection for American physicians.

It complains that numbers of physicians, so-called, come over from Germany on every steamer. They possess a university diploma of M. D., which entitles them to practice as soon as they get here, though they could not practice in Germany, because they have never passed, and are not able to pass the state examination. Here, however, they have at once the legal status of a physician. They settle down in the German districts, put out a sign and pay visits for twenty-five or fifty cents. England, France and Italy make similar contributions annually to the number of practicing physicians of the United States. On this account, the *Record* says, "there is a growing feeling among physicians in New York City that if the principle of protection be applied to some class of workers, it might with equal justice be applied to the doctor."

It is not disputed that the ranks of physicians in this country are overcrowded. If, however, doctors need to be protected from incompetent Germans, they need quite as much to be protected from incompetent Americans,

who are turned out of the regular medical colleges by the wholesale, and are authorized by their diploma to practice medicine with often an entirely inadequate preparation for their work. One diploma mill, we have in mind, graduates its young men after two terms, or a total attendance of six months. Competent doctors may or may not think they require protection from this class of practitioners, but it is certain that the public do. It matters not whether the physician comes from Germany or from Kentucky, the fact that he holds a diploma from some alleged medical college ought not of itself without further proof of fitness to entitle him to practice his probable ignorance upon a suffering and defenseless humanity.

Germany is perfectly right in permitting no one to practice medicine there without passing the state examination. A like provision here would protect the doctors by keeping out thousands of competitors; but its chief recommendation is that it would protect the public in great measure from the quacks and incompetents who, armed with a diploma from some obscure college, now practice unchallenged on whomsoever they can persuade to entrust their health to their keeping.—*Philadelphia Press*.

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ORIGINAL COMMUNICATIONS.

EXTERNAL MEANS IN THE DIAGNOSIS OF PREGNANCY.

BY E. S. M'KEE, M. D., CINCINNATI.

This question is one of much importance, and probably one of the least overdone, of the subjects which might be brought before this society.

The average obstetrical student in this country knows little of the external means of diagnosis in pregnancy. It is in the great lying-in-hospitals of Germany, Austria and Dublin that the art is best taught. The tactus eruditis is probably as capable of cultivation in this direction as in any other, and experience here, as elsewhere, is an excellent teacher.

Credé in his recent work teaches that women in labor and in the lying-in state are diseased only through infection from fresh wounds. "He who does not examine a woman cannot infect her." Such is the maxim of Credé. Seldom or never do we find the course of child birth unaccompanied by solutions of continuity. The larger of these are generally made by some artificial assistance to parturition. From the most careful digital examination we may have some wounds, hence we should dispense with these entirely, or restrict them to the fewest number possible. The digital examination is altogether omitted in normal labors, for weeks in succession, at the lying-in hospital at Leipsic, especially if there be much sickness present among

the women. This omission is followed by the most favorable results. In every labor external examination should be given greater importance, and the internal only permitted where positively demanded. In total abstinence from vaginal examination, we then have the surest prophylaxis against infection.

But we must know the position of the child and the stage of labor. To learn this, we must use wisely and well all the external means of diagnosis.

Inspection is one of the first of the external means at our command. This should begin with the face, where we are often able to see a peculiar brownish pigmentation called la masque, or cholasm. Inspection of the breasts reveals the pigmented areole or the tubercles of Montgomery. The size of the abdomen, and the brown line extending down the center, are to be noted. The umbilical cicatrix, by its depressed, obliterated or protruding condition, shows, to a certain extent, the stage of pregnancy. Yet enlargement of the abdomen from other causes may produce this. Bandel has pointed out the existence of a transverse and distinct furrow, about midway between the umbilicus and the pubes. This occurs when there is some abnormal obstacle to the expulsion of the child. If this is

at all constant, which I doubt, and occurs only in abnormal labors, it would furnish a valuable indication for operative interference. It may also be taken as a warning of possible rupture of the uterus. This constriction is found at the junction of the cervix and the body. The linea albæ may be seen in multiparæ. Recent ones are of a livid blue or a rosy red, while old ones are white and resemble old cicatrices. Movements of the abdominal wall from the activity of the foetus may be often noticed; also a projection of the uterus through between the borders of the recto muscles when the patient lies in bed. Inspection tells us much as to the state of pregnancy by the height of the uterus with reference to the umbilicus. However, variations occur in multipara and primipara, and whether the pregnancy is single or multiple, plural pregnancy, non-reducible, oblique and transverse presentations, the height of the uterus cannot be taken to indicate the period of the pregnancy. Contracted pelvis, distension of the bladder or rectum, deformities of the vertebral column or thorax, tumors of the uterus, ovaries, pelvis and hydramnios further influence the diagnosis. Inspection will often tell whether the patient is in her first labor or not. If not the first the breasts are flaccid and pendulous and the nipple enlarged and withered. The abdominal walls are flabby, often look withered and discolored, can easily be raised into folds, and sometimes the skin is pendulous and pouches over the pubes. This tends to dispel these signs.

No amount of force is needed, indeed gentleness is quite necessary, and force

frustrates the object. It causes the woman to fear you, and excites reflex contractions of the abdominal and uterine muscles, which keeps the foetus removed from the touch of the examiner. The examination should not be the ordinary superficial kind, rapidly practiced under the clothing, but the systematic, scientific and accurate manipulation by which in most instances we are able to ascertain the existence of pregnancy, the position in utero, approximate size and general formation of the foetus and the relations of the uterus. This information enables us in many cases to readily rectify mal-position, to facilitate expulsion of the placenta, and to prevent or arrest post-partum hemorrhage. Any abnormalities in form or texture of the upper part of the uterus or its appendages, or of the abdomen, can be detected. To palpate properly, the bladder and rectum should both be empty, the thigh flexed on the pelvis with about twenty inches between the knees, decubitus as horizontal as possible. Lay one hand, warm, flat on the hypogastrum of the patient, so as to become accustomed to the contraction of the abdomen on contact with the hand. In a very short time this disappears and we can freely outline and explore the shape of the uterus. In case the muscles are still too firm, we can gain relaxation by talking to the patient, thus taking her attention away from herself. We can determine the size of the uterus by plunging the hand deeply into the abdominal wall, when we can grasp the fundus itself. By making alternating pressure with the hands on each side of the tumor, we can displace the solid body.

The shock with which it strikes the side we may call abdominal ballottement. These shocks sometimes occur of themselves, and they are then due to foetal movements. Pajot calls them foetal shocks. It is also sometimes appreciable by auscultation. By the simple pressure of the hands we may be able to recognize the presence of living foetus and the volume of the uterus, and thus establish absolutely the diagnosis of pregnancy. We can then determine the presentation and position. The head, we find, a round, hard, partially displaceable mass, more or less perceptibly separated from the trunk by the depression of the neck. This depression varies according to the flexion of the head. I have not met with the parchment-like crackling sensation found under favorable circumstances by firm pressure on the head. The nates also form a hard, rounded and moderately moveable mass, but the distinctness of these characteristics is less marked than in the head. In the normal position of the foetus, the feet are a smaller and less prominent part. They partly float in the liquor amnii and may be displaced with the utmost facility by one hand; they do not return to their place with the quick rebound which in the head and breech gives the sensation of ballottement. The heel or sharp maleolus can sometimes be felt if the abdominal walls are thin and the conditions for palpitation favorable. Indeed, the whole foot may in some instances be grasped in the hand. The back is found between the head and breech. The foetus being curved upon itself, the back is more appreciable on one side than the other. If we

now alternately depress the two lateral walls of the abdomen, we will find a feeling of fullness and resistance on one side. The back furnishes a line of greater and more uniform resistance than the front. Upon the front will be felt mobile parts, the limbs of the foetus. In cases where the abdominal walls are thick, foetus very movable, amniotic fluid abundant, and it is difficult to decide the points of diagnosis, Budin advises to seize the breech in the hand and force it against the cephalic extremity. We thus increase the dorsal convexity and render it more prominent, and the back is applied more forcibly to the abdominal wall, it is entirely engaged and we can only appreciate the back of the head. When the head is above the superior strait, with one hand we can recognize both its presence and mobility. Pinard has drawn attention to the fact that when the head is flexed, as it must necessarily be for engagement, there must be a depression of the occipital protuberance on the one side and an elevation of the forehead on the other. The side which offers the least resistance will correspond to the occiput and the other to the forehead. This demonstrates to us the direction of the back which will be on the side opposite the forehead.

Failing to find the head in the superior strait, we must look elsewhere. It may be far removed; it may be in one of the illiac fossæ. In the latter case, we have only to slide the hands a little farther to each side. If above the umbilicus, we find it in much the same way and distinguish it by its roundness, resistance and mobility, which prevent our mistaking it for anything else. The

absence of the depression or furrow corresponding to the neck, is an item of importance in searching for the breech.

When possible to palpate the anterior shoulder, it often shows reliable evidence, for it is always found in the same lateral half of the pelvis with the occiput. When the head has engaged it, it forms a prominence above the superior strait, lying on the left side in the first position, on the right in the second.

Abdominal ballottement may be made with one or both hands. It is one of the most reliable symptoms of pregnancy. Yet Pajot has found it in a woman not pregnant, but suffering from a multilocular ovarian tumor. It can only be obtained after the fourth month, and is especially useful at the sixth and seventh months. Hydramnion and multiple pregnancy prevent it.

The sensation has been described as that of a piece of ice floating in a vessel of water and striking against the sides. If cephalic ballottement is once fully appreciated, it cannot be confounded with anything else. The placenta can sometimes be determined by palpation when it is placed anteriorly. It is recognized as a fleshy mass which raises the palpatting fingers from the foetal surface.

Palpation, though not a certain proof of the death of the foetus, can often determine this condition. The hand discovers an unusually flabby and compressible condition of the abdomen, contrasting sharply with its former firm and elastic feel, and motion is not distinguishable. The body remains passive in any position in which it is pushed. The size of the foetal head and the presence of hydrocephalus can be

made out by palpation. We can measure the foetus with the calipers, which are applied to the head and breech. This shows one-half the length of the foetus, thus giving its age and the size of the uterus.

A case is reported by Biddle in which the cord was found passing transversely over the back by palpation, and also inspection. It was easily movable, but could not be slipped over the breech. It pulsated 153 times per minute, and measured at birth thirty centimeters.

In favorable cases, twins may be detached by palpation. The presenting part may be fixed; other parts movable. The great sign is the presence of two absolutely identical parts, as heads or pedal extremities. Three large parts may be made out of two found separated by such distances as to make it impossible for them to belong to the same foetus.

Intermittent uterine contractions, first brought to our notice by Braxton Hicks, are almost infallibly peculiar to the pregnant uterus. These contractions may be felt as soon as the uterus has ascended above the pubes, and may be produced by pressure or friction over the fundus. Previous to the fourth month it is necessary to empty the bladder to obtain the sign. It is constant, is not simulated by any other condition, and is one of the most valuable of all means of obstetrical diagnosis. They occur every five or ten minutes, and are present whether the foetus be alive or dead.

Abdominal tumors, such as uterine fibroids, ovarian cysts, etc., are usually only accessible to palpation during preg-

nancy. Their detection is often of the greatest importance.

Fœtal movements may be sensible or visible. It is necessary that we appreciate these movements ourselves, as we cannot rely on the statements of the women. Most women who desire or fear themselves to be pregnant, think they feel life. We should be especially careful about the menopause. The fœtal movements of a strong and healthy child are active, providing there is a sufficient quantity of liquor amnii to allow freedom of action. If the amniotic fluid is excessive, the movements are rapid and flighty. As a rule the size of the foetus and amount of liquor amnii are in inverse proportions.

Extra uterine fœtation can be detected in some few instances, but only when a distinct lateral tumor is palpable. This is quite unconnected with the uterus, and if pregnancy be sufficiently advanced, the foetal heart sounds and foetal parts can be ascertained.

Palpation ought to be practiced after auscultation, because manipulation disturbs the child, increases the heart beat and modifies the results gained by auscultation.

Percussion has the least value of the means of external diagnoses. The degree of distension of the bladder is one of the most important of the things learned. Claims have been made that the diagnosis of pregnancy is possible at the second month by percussion, but these are unsustained. Light percussion sometimes produces a tympanitic sound, if the intestines get in front of the uterus. Forceful percussion, however, will bring out the dull sound of the pregnant uterus.

Auscultation is one of the most important of the means of external diagnosis, yet it should not be exclusively relied upon as is too often the case. The other modes afford valuable information and the examination to be systematic, accurate and thorough should embrace all four. Meyer, of Lausanne, was the first advocate, Korgaradoc the first pupil, Depaul enlarged the scope of the means, and after some opposition it spread rapidly through Germany, France and England. In 1869 Depaul used auscultation to determine the position of the foetus. If a stethoscope be used, it should be of medium length, and the end piece should cover considerable surface. It should be held perpendicular to the abdominal walls and kept in position by the head of the examiner, avoiding all contact with the hand or clothing. The stethoscope is useful, but in the majority of cases by no means indispensable. It is claimed that the point of maximum intensity can be more correctly determined by the use of the instrument, but it can be sufficiently accurately ascertained by the ear unaided. For myself, I prefer immediate auscultation, reserving the right to select my cases. The stethoscope is probably better to get at the uterus when just above the superior strait. Auscultation enables us to hear the umbilical or tunic murmur, the placental murmur, the pulsations of the abdominal porta, and the gurgling noises caused by the fluids and air in the intestines. Occasionally there may be heard a splashing noise, due to the movements of the foetus in the liquor amnii, the foetal shock, muscular subsurrus sounds, due to the friction of the

uterus against the abdominal walls; others by the impact of the foetal limbs against the uterine walls, and by all means the most important aid given by auscultation, is the recognition of the foetal heart sound. When plainly heard, these prove not only the presence of a foetus, but also enables us to affirm that it is living and strong. We can say with reasonable positiveness when we fail to hear the foetal heart beat, having always heard it previously, that the child has ceased to live.

Twin pregnancies as well as triple ones can often be diagnosed by auscultation. In twin pregnancies there are two points of maximum intensity, then a point of minimum intensity, which should augment as we approach the respective points where the heart is plainest heard. The two hearts must have a different rhythm. If the sounds do not emanate from the same heart, they are plainly audible at several different points, and at intervening points they are not audible, or scarcely so.

The time at which the foetal heart is first heard is from the eighteenth to the twentieth week. Cases are reported where it has been heard at the thirteenth, fourteenth and sixteenth week, but they are very rare. Certain conditions modify very much the time at which the foetal heart can first be auscultated. The auscultator should be careful not to listen with the head lower than the rest of the body. Weight thus causes an increased amount of blood in the cerebral circulation and hinders hearing. There are doubtless cases where it is impossible to hear the foetal heart and yet all be healthy. Schroeder's statement that it can always be

made out in a healthy woman and a healthy child, is possibly a little too strong, though not much. With a moderate amount of practice the foetal heart sounds can be heard without difficulty in almost every case. They vary in frequency from 120 to 130 beats. They increase in foetal activity, and with the temperature of the mother. If the maternal temperature rises to 102 degrees, the foetal pulsation is much accelerated, and if above 104 degrees the foetus usually dies. There seems to be no definite relation between the frequency of the maternal heart beat and that of the foetus. The intensity of the foetal pulsations varies with the foetal development, the thickness of the abdominal walls, the quantity of the amniotic fluid, and the position of the foetus. It is not difficult to distinguish between the maternal and the foetal pulsations, even if the maternal pulse is much accelerated, for the maximum of intensity is different.

The diagnosis of the sex of the child from the number of the foetal heart beats per minute was a subject which at first attracted much attention and gave hopeful promise. Like many other theories, investigation proved disastrous. It is now considered that the number of pulsations per minute will come much nearer determining the size and length of the child than its sex. We can doubtless say that the majority of cases in which the pulsations are less than 130 per minute will prove males, and the majority above that number will be females. This comes from the fact that males are larger and heavier, generally, than females, the pulsations in larger animals being more seldom than in smaller ones. It has also been found that the pulsa-

tions in males are fewer per pound than in females. Broadly speaking, the pulsations in females are more rapid than in males, and in small children than in large, but these facts lose much importance in isolated cases. If the pulse is repeatedly counted in the latter months, it will be found to vary considerably—as much as 15 to 20 pulsations in consecutive minutes. This is, in some instances, probably due to the movements of the child, which greatly accelerate the heart beats. As gestation progresses, the foetal heart beats gradually diminish in frequency. Increased size, hardness and firmness of the cranium in males as compared with females offers, in all probability, greater promise of distinguishing the sex than the number of the pulsations. But here also exceptions are numerous.

The uterine souffle is a simple blowing or wheezing sound, synchronous with the maternal pulse and pretty generally audible over the whole uterus. It is never accompanied by a pulsation, and is not a certain sign of pregnancy, but one of considerable probability. It is rarely heard before the fourth month, though reported at the eighth and ninth week. The uterine souffle is sometimes palpable in the form of a distinct thrill in the immediate vicinity of the umbilicus.

The umbilical souffle is a blowing, hissing sound, synchronous with the foetal cardiac sounds, and is heard either in the place of these sounds or in addition to them. It probably originates in the umbilical cord, and is caused by some obstruction to the flow of blood through the umbilical vein or arteries;

it may originate in the foetal heart itself when the valves are diseased.

Presentation and position can be diagnosed by auscultation. Depaul maintains that the heart is situated nearer the head than the pelvis. This, if true, would be of considerable worth determining between these two positions, but this fact is denied by Matthews Duncan, who says there is really no appreciable difference in the foetus, and he lays no stress at all on this as a means of diagnosis. Ribemont has also shown by recent investigations that the heart is situated about equi-distant from these extensions—the cephalic and pelvic. He thinks if there is a low position of the heart in cephalic presentations, it is due to the engagement of the head and the subsequent sinking of the trunk. In pelvic presentations, the breech does not become so readily engaged, and the heart is more frequently found high in the uterus. Abnormal conditions, such as deformity of the pelvis, abnormal insertion of the placenta, unusually large head, or failure of the head to engage, may restrain it from entering into the superior strait, and the heart sounds are heard at a higher point. Chantral and Tarnier also disbelieve in the difference of the heart beat in the cephalic and pelvic presentations. In face presentation we have the heart sounds transmitted through the cardiac region of the foetus, the maximum of intensity being at the right, directly opposite to where it should be in head presentations. The head failing to engage, the sounds will be heard higher in the uterine cavity. The disagreement be-

tween auscultation and palpation will probably attract the attention of the examiner to the possibility of a face presentation. In the diagnosis of transverse positions, auscultation is much inferior to palpation. It may be stated in a general way that in the cardinal positions the maximum of the heart sound will correspond to one of the four segments of the abdomen, which are made by drawing a line from the ensiform cartilage to the symphysis pubis, intersected by a line which divides the

uterus into two equal parts. This line should not be drawn through the umbilicus, as has often been recommended, for that is the most migratory organ.

A knowledge of the position and presentation of the child, before labor has advanced too far, may enable the accoucheur to change a transverse or breech position, or make a normal out of an abnormal labor.

Manifold and invaluable are the advantages gained by use of the external means of the diagnosis of pregnancy.

SELECTED ARTICLES.

MEDICO-LEGAL CASES IN THE COURTS.

BY HENRY A. RILEY, ESQ., NEW YORK.

The decisions regarding the inherent right of municipalities to pass regulations for the public health are becoming very numerous, and form a body of law approaching in importance that of any other department of jurisprudence. The tendency in the decisions is to restrict private rights and to show to boards of aldermen how practically uncontrolled are their powers in many directions. An ordinance hurriedly passed, and without careful consideration, may often work serious injustice, and not be really demanded by regard for the public health. Whether this is true in the following instance, it is impossible to tell at this great distance.

A city ordinance of Mobile, entitled an "ordinance to establish and regulate markets," provided that no fresh meat should be sold outside of certain markets established by the ordinance.

This naturally broke up the business of many persons, who felt that their constitutional rights to freedom of trade had been infringed, and an appeal was made to the courts to declare the ordinance unconstitutional. The tribunals

ruled, however, that the ordinance did not exceed the powers of the city authorities. They did not, indeed, have power to prohibit entirely the trade in fresh meat, but they could regulate it, which involved the idea of prohibition in certain localities, provided it appeared that the public health demanded the concentration of the traffic. The important point in this decision, as in all others of the kind, is that practically there is no way to control city authorities in their determination of what the public health demands. This almost unlimited power is a matter of serious importance, though it cannot be said that it has thus far been exercised so as to work gross injustice.

It may be noted, however, that the courts will exercise control in cases where it is evident that some other reason than the public health prompts a municipal ordinance. Take, for instance, the law in this State, passed a few years since, prohibiting the manufacture of cigars in certain rooms of houses in New York City, and in certain houses entirely. The circumstances

surrounding the origination of this law seemed to show to the courts that the endeavor to stamp out competition was the controlling motive of the law, and not a regard for the public health. Taking this view, the courts held that the conceded power of the Legislature to regulate the cigar manufacture on real considerations of public health could not be used to aid a monopoly, and the law was declared unconstitutional. It would be of great value, as showing the drift of the law, if the decisions of the last few years on questions of public health were gathered together and properly collated.

The accident insurance companies desire the public to believe that they give ample protection against all injuries resulting from accident, yet claims are often refused payment which seem to come under this head.

The Fidelity and Casualty Company not long since defended a suit on a policy where the facts were as follows: A person insured against accidents was driving upon a public street, and his horse became frightened and ran away, without upsetting the carriage or coming in contact with anything, and was at length brought under control. The insured was apparently greatly endangered at the time and suffered so severely, either by fright, or strain caused by his physical exertion in restraining the horse, that he died within an hour afterward. Under these circumstances, the court held that the death ensued from bodily injuries effected through "external, violent and accidental means." Certainly there was an accident. The definition of "accident" usually assented to is an event happening without any human agency, or, if happening through human agency, an event which, under the circumstances, is unusual and not expected to the person to whom it happens. This definition exactly suits the facts here. Argument can not be necessary to satisfy any one that the injury happened

by violent means. A well man suddenly meets a perilous emergency, which taxes all his physical and mental strength, and his death is thereby caused in an hour. The greater question is whether the death was caused by external means. We have no doubt that it was. All the evidence that we have, more than the facts already stated, is that the insured became deathly sick, and after death a discoloration appeared on the surface of the body in the region of the heart. There is no pretence that the body bore any marks of contact with anything inflicting injury, or that it came in contact with any physical object during the time of the accident.

Our belief is, that on the facts legitimately before the court, the death was produced by a ruptured blood-vessel about the heart, and that such rupture was caused by the extraordinary physical and mental exertion which the deceased put forth to save his children and himself from injury. The jury decided that the policy of insurance must be paid, and this verdict was upheld by the Appellate Court.

The mode of execution by electricity which was recommended not long since by the committee of the Medico-Legal Society of this city, is as follows:

A stout table, covered with rubber cloth, and having holes along its borders for binding, or a strong chair, should be procured. The prisoner, lying on his back, or sitting, should be firmly bound upon this table or in the chair. One electrode should be so inserted into the table or into the back of the chair that it will impinge upon the spine between the shoulders. The head should be secured by means of a sort of helmet fastened to the table or back of chair, and to this helmet the other pole should be so joined as to press firmly with its end upon the top of the head. We think a chair is preferable to a table. The rheophores can be led off to the dynamo through the floor or to another room, and the instrument for

closing the circuit can be attached to the wall. The electrodes should be of metal, between one and four inches in diameter, covered with a thick layer of sponge or chamois-skin. The poles and the skin and hair at the points of contact should be wet with a warm, aqueous solution of common salt. The hair should be cut short. Provision should be made for preventing any moisture reaching from one electrode to the other. A dynamo capable of generating an electro-motive force of at least three thousand volts should be employed, and a current used with a potential between one thousand and one thousand five hundred volts, according to the resistance of the criminal. The alternating current should be made use of, with alteration not fewer than three hundred per second. Such a current, allowed to pass from fifteen to thirty seconds will insure death.

The mode of execution above described, or any other which may be devised, will not be made use of for some months at least, as the law prescribing the use of electricity only applies to murders committed after January 1, 1889. Many of the papers have, however, been imagining, with a grim humor, the strange scenes which may come to pass when the law is finally invoked. A writer in the New York *World*, for instance, suggests the following as a scientific sentence to be pronounced by the judge: "I therefore sentence you to be taken to Sing Sing prison, there to remain confined until , the . . . day of , 188 . . . , between the hours of . . . and . . . A. M., when you will be taken to

a cell specially designed for that purpose, be forcibly seated in a properly insulated chair, with one semaphore placed upon the junction of your frontal and parietal sutures and the other just over your medulla oblongata, and then and there made conductor for an alternating current of one thousand eight hundred volts intensity, said current to pass through the ganglia and vasomotor centers of your cerebral tissue until you are dead, dead, dead; and may the Lord have mercy on what is left of you."

There was a recent case in Massachusetts where a manufacturer made use of a new chemical in dyeing cloth, and a purchaser was poisoned by handling it. In an action for damages it was held that the manufacturer was not liable, as the injury was the first known instance of harm resulting from the use of the mordant.

The Board of Health of Illinois a few months ago revoked the license of H. G. Wildman, a physician, the chief charge being that he had overstepped the ethics of the profession by advertising his success and skill in newspapers. Dr. Wildman then appealed the case to Governor Oglesby, and he rendered his opinion a few days since, reversing the decision of the Board of Health, and claiming that a physician should not be debarred from practice because he advertises what he can do and has done. Dr. Wildman expends over \$40,000 yearly in advertising in papers all over the Union, and several of the Illinois papers went on his bond in the action. The decision has caused considerable comment in the West.—*Med. Record.*

SPECIFIC VAGINITIS.—For specific vaginitis Professor Parvin ordered mucilaginous injections and warm hip

baths in the acute stage, followed by injections of 1 to 1000 corrosive solution and tampons of boracic acid and glycerine.—*Ibid.*

NASAL DISEASE IN GENERAL PRACTICE.

N. S. ROBERTS, M. D., NEW YORK.

It is my purpose in the brief time allotted to this paper merely to present the importance of the study of nasal diseases and its claims upon the attention of the general practitioner.

That the importance of this subject is not generally appreciated, and that its claims are slighted, is obvious to any one who is conversant with professional habits and who has given much attention to the subject. This is perhaps not strange when we consider how comparatively recent are the methods of examination and treatment now adopted, and how great the advancement has been in this field since instruments of precision have been introduced. With the aid of the nasal speculum, the head and rhinoscopic mirrors, that part which was formerly an unknown region becomes familiar, and the pathological conditions are displayed to the vision which were otherwise unknown or merely suspected.

While a certain degree of skill and training is necessary for the successful use of these instruments, such skill is not beyond the ability of any physician of ordinary tact to acquire, and the facilities for its acquisition are now so fully afforded by the institutions for post-graduate instruction which abound in our cities that no excuse is tenable to those at least who reside therein.

Moreover, the topical treatment of the diseased conditions found upon examination, including a number of minor operations, can be fairly well done by the general practitioner after a few months of training.

In all these respects, the study of diseases of the nose and their treatment differs greatly from that of the eye, in which the technical knowledge and skill required are such as to demand the undivided attention of its devotees. In diseases of the larynx, also, much greater training and skill are usually

required than in those of the organ under consideration. The importance of a fair knowledge of diseases of the nose will appear from a brief review of that field.

The reflexes of this region have been so much written about, and under such frequent discussion in medical societies, that all who keep abreast of the times must have been impressed with the importance of this part of the subject. Among the reflex disorders which have been clearly proven to arise, in some instances, from nasal disease, are asthma, hay fever, vertigo, headache and disturbances of vision and hearing, every one of which, though not of a grave character, entails such a degree of prolonged distress as to make it important to study out its causes and to call for our best endeavors to relieve them.

Reflex Neurosis.—Dr. Ecklund, of Stockholm, reports in the Annual of the Medical Sciences, a case of neuralgia of considerable intensity, in which medical treatment had entirely failed to give relief, whereupon an atrophic rhinitis, from which the patient suffered, was thoroughly treated with chromic acid applications, with the result of completely relieving the neuralgia.

Two cases of asthma, due to adenoid vegetation, are reported by Dr. Mygind, which were cured by their removal.

Two years ago I had a patient, a young man of about twenty, who suffered greatly from frequently recurring attacks of asthma, which were relieved temporarily by iodide of potassium. On inspection, the nose revealed hypertrophy of the tissues overlying the middle turbinated bone. I removed this growth with Jarvis' snare, and there was no recurrence of the asthmatic attacks for nearly a year, when two or three of less severity occurred. Another ex-

amination showed a similar tumefaction overlying the lower turbinate. I removed this in a similar manner, and though the second operation was done about a year ago, since then there has been no recurrence of the asthma. Cases are recorded in which accommodation have been relieved by the removal of nasal polypi, or the cauterization of an engorged Schneiderian membrane with chromic acid.

Cases of vertigo due to nasal disease are reported by Lefferts and McBride, of this city, Dr. Fauvel and Joel, of Paris, and others. The most frequent conditions were rhinitis and mucous polypi, especially the smaller ones. Adults are found to be more liable to this neurosis than children.

Dr. J. Solis Cohen reports a case of hysterical sneezing cured by the application over the sensitive spot with a continuous battery current, the positive pole in the nostril, the negative pole on the cheek; at first five Daniell's cells were used, then twenty, the length of the sitting being from ten to forty minutes.

Obstructed nasal breathing is among the most common of the minor ailments. One has but to watch the countenances of the throng of persons he meets in his daily rounds to be convinced of this fact, even among one's personal acquaintances. How many mouth breathers we may find, besides many who, having but moderate nasal obstruction, are able to breathe naturally during the day-time, yet breathe through widely-open mouth when asleep.

Through this habit many cases of disease of the lower air passages doubtless arise, yet the removal of the cause is a well defined and usually a successful operation, whether that cause be hypertrophied tissue, polypi, deflected nasal septum or adenomatous growths.

Chronic nasal catarrh is one of the most extensively distributed of all afflictions, and in addition to the personal

discomfort which it inflicts upon its victims as well as upon all others who may be obliged to pass any time in their near vicinity. If not checked by proper treatment, it may extend through the custachian tube, setting up otitis media—or if downward, invading the pharynx and larynx. Furthermore, the constant flow of disordered mucous from the nasal passage into the stomach, especially during the hours of sleep, is undoubtedly a source of much disturbance in that organ. Yet, perchance, because chronic nasal catarrh has no particular fatal tendency, it is not an uncommon practice to prescribe some nasal douche, or favorite catarrh snuff, and send the patient away without so much as inspecting the nasal cavities to search for the cause or condition.

If the same care and discrimination were bestowed upon these cases as is commonly given to the treatment of uterine disease, for example, it is certain the results would be at least equally successful.

That even the external auditory canal is not free from the pernicious effects of nasal disease, either through reflex influence or extension by continuity of structure, has been fully shown in an instructive article upon diseases of the external auditory canal by Dr. Samuel Sexton, published in the *Medical Record* of October 13 last. He mentions polypoid growths as a cause of hyperæmia of the inner end of the canal. Catarrh is a frequent cause of otitis externa circumscripta and diffusa. He also quotes 800 cases of ceruminal accumulation, in 601 of which the patients were suffering from marked catarrh of the upper air tract.

Loss of smell is one of the evil results which may follow in the train of nasal disease or tumors, and sometimes from the injudicious methods of treatment, as the injection of strong astringents, or even the too assiduous or long continued use of mild ones. The

subject of this loss is not only deprived of the pleasure of inhaling pleasant odors, but has lost one of the safeguards which nature has provided as a means of warning against danger. The disagreeable emanations from decaying substances and the foul odors incident to certain diseases have for him no significance.

As an important use of this function, the presence of sewer gas may usually be detected by its unpleasant odor; if not, the peppermint test may be employed.

The odor of the breath may assist us in differentiating between coma due to alcohol and other causes. In entering a crowded apartment from the open air, how quickly the nose gives warning of the slow poisoning which is going on, and moves us to action for securing a better atmosphere.

All the conditions we have mentioned are such as we are likely to meet with frequently in our daily practice, and their prompt recognition will often save us the mortification and our patients the pains and discouragement resulting from a prolonged course of treatment, which is ineffectual because it was not directed to the original cause. This remark is especially applicable in those cases where more or less distant disturbances arise from reflex influence, originating in some part of the nasal cavities, and these should always be borne in mind in cases of disturbed nutrition or innervation occurring in regions whose nerve supply is common with that of the nose.

In view of the facts thus far presented, what I would advocate is as follows:

Let every general practitioner who aspires to an all-roundness in his professional equipment include therein a brief course of special training in diseases of the nose and throat, chiefly to acquire skill in the use of instruments and in diagnosis, supplementing the same by such clinical work and observa-

tion as his opportunities and the clinical institutions of his environment may afford.

Furthermore, one or several treatises on the same subject should be carefully read and studied. Having gone thus far, it is certain that an interest in this department of practice will have been developed which will lead to the same advancement and the same enthusiasm therein as is more commonly shown in other special lines.

Let every patient who seeks our aid for relief from chronic catarrh receive at our hands the benefit at least of a careful examination and an intelligent diagnosis; and if no conditions are found calling for special skill, let the case be treated with the same care and upon the same surgical principles as we would employ in treating diseased conditions of other mucous membranes, especially bearing in mind the differing conditions of hypertrophy and atrophy which pertain to the earlier and later stages of chronic congestion.

Moreover, we should equally bear in mind the etiological factors involved, and seek to make our work effective by giving our patients the benefit of hygienic conditions so far as possible.

If moderate hypertrophies are found, much may often be accomplished by our cleansing and sedative applications, supplemented by well selected astringents. By patient and persevering use of these methods we may often avoid severe measures, especially in those cases which do not require immediate relief. In the case of female patients and children, mildness in our methods will be specially appreciated and redound to our ultimate reputation and benefit.

The differentiation of morbid growths will sometimes call for all our knowledge and skill. A mucous polypus of moderate size attached to the anterior extremity of the middle turbinated bone, affords an easy task for diagnosis and removal, but when filling the space of

the posterior naris, or partially concealed within the naso-pharyngeal space, it will often call for the use of the rhinoscopic mirror to determine whether the growth is a mucous polypus, a fibronia, a hypertrophic growth or a naso-pharyngeal polypus; even with the aid of this instrument the diagnosis is often difficult to make.

It is in those cases difficult of diagnosis that the patient must be relegated to the care of a specialist, as well as those requiring surgical operations of an unusual character, as, for example, cases of so-called naso-pharyngeal polypi, which differ very greatly from the common mucous polypi, both in the character of the growth and in the tendency of the latter to extensive growth and destruction of adjacent parts; the nature and tendency of these tumors is of so grave a nature as to demand the highest order of surgical skill.

In undertaking to treat even the simpler forms of nasal disease, caution and conservatism should ever be borne in mind. Powerful astringent solutions should be applied by means of a mop or brush, as the employment of the

stronger spray, and especially of the syringe or douche, may cause the fluid to enter the eustachian tube, frontal sinus or the larynx, possibly set up a dangerous inflammation in those cavities.

In employing such caustics as the acid nitrate of mercury or chromic acid, care should be taken that the opposing surfaces do not become agglutinated, in which case the last state of that patient would be worse than the first.

In the removal of nasal mucous polypi, the snare should be employed in preference to the forceps, as the latter method is not only more painful, but is liable to tear away healthy tissues, causing atrophy and partial loss of smell.

Perchance the observations which I have endeavored briefly to present may seem trivial to those who are familiar with the subject, but if they shall serve to direct an interest thereto on the part of others, and to impress the importance of painstaking treatment in a department which it has sometimes been the fashion to treat with scant regard, the purpose will have been accomplished for which they were written.—*Jour. Resp. Organs.*

SOME OF THE ABUSES OF ETHERIZATION.

BY GEORGE F. SHRADY, M. D., NEW YORK.

Many points connected with anesthesia have come up from time to time before this Society, and there has appeared such a disposition on the part of some members to discuss them that it has occurred to me that an opportunity for so doing might be afforded by a few general remarks on the abuses of etherization.

Notwithstanding etherization is so extensively practised, much is yet to be learned of the simple details of its administration. Especially is this the case

with matters which bear upon the comfort and safety of the patient, and upon the subsequent state of health. In what is to be said, it must not be understood that there is special need for emphasizing precautions or formulating rules for members of this Society, whose large experience in hospital work is a guarantee against accident or carelessness, but as a result of the saying, some good may come to those who wish to know what is believed to be the safe and accepted method of the present day.

In other words, it may be interesting to know what experience has taught us to do, and what to leave undone in many of the various conditions which govern anaesthesia. Let us premise by asserting that we shall confine our remarks exclusively to the abuse of ether, leaving, for the present at least, chloroform entirely out of the question.

Ether is generally believed to be a safe anaesthetic. While this is in the main true, it is equally true that on this account we are often given to use it quite recklessly. The English characterize the American method of administering ether as rude, dangerous, and oftentimes actually cruel. They speak of it as the drenching plan. This criticism is founded on a great deal of truth.

In one of the larger hospitals of this city, for a long time, there was hung in the consulting room a graphic picture of the struggle in "getting a patient under ether," at least that was the title. To the unsophisticated eye it suggested a lively rough and tumble scramble to get the poor patient under the numerous attendants. There was such a confusion of flexed elbows, crooked knees, bent backs, bowed heads, climbing postures, and flying coat tails, that it was difficult, except for his presenting foot, high in air, to make out which end of the victim was at the head of the table. Every one who had never been anaesthetized in this way smiled when he looked at it. To any patient who had been through it all, there was a keen appreciation of the desperate goneness of the under dog in the fight. Every one has seen the original battle in progress, but as the poor laid-out dog generally comes out alive, the smothering scene becomes merely an amusing part of the play.

So many patients have complained of the immediate and after effects of such treatment that it appears almost a conscientious duty on my part to speak for them. It is impossible, within a given compass of time and space, to do more

than refer to the sufferings, suspense, shock, and even agony of fear which they have endured during these ordeals. But there is scarcely a surgeon who has not heard similar experiences. In nothing is the grim doctrine of being cruel to be kind more strikingly exemplified as in instances of what is now termed rapid anaesthesia.

In some general remarks upon the abuses of anaesthesia, what grow out of them, and their remedy, I am convinced that we cannot go far out of the way in introducing the rapid or drenching method as the head and front of the offending. What I mean by the rapid method is this: When everything is ready for etherization to begin, the sponge is saturated with ether, and the cone or inhaler crowded upon the patient's mouth and nose, and forcibly held there until the struggling ceases and the patient becomes quiet. It is a simple smothering process from beginning to end. It is not difficult to assume that this is all wrong, and that the only possible excuse for it is that it saves time. Against the latter is oftentimes weighed many of the distressing sequelæ of shock, which we see even years after the anaesthesia has been experienced.

In the category of shocks of anaesthesia the crowding method takes the first place. Nothing can be more demoralizing than to choke a patient suddenly and forcibly with an irritating vapor, without the chance of an appeal for a single breath of fresh air. All the sensations of actual impending asphyxia are present of necessity. Natural breathing is almost as effectually shut off as if the head were held under water.

It is not contended that the pure vapor of ether cannot be breathed with safety; but the time for proving it is not with suddenness and when the lungs are mostly filled with residual air. It is on account of the latter condition of things that nature rebels in desperate struggles against the sense of suffo-

cation. The residual air is five or six times more than the respiratory tide, and is thus completely shut in, and partially charged as it is with gases that should have a ready escape. It is this anomalous state of affairs which doubtless gives rise to those reflex struggles for breath which are remembered by patients with so much horror long after the other experiences connected with the operation are forgotten.

How much more rational it is to allow the lungs to empty themselves of the residual air by a gradual process of forced expiration. The latter means keeping the sponge from direct contact with the face until the ether vapor takes the place not only of the respiratory tide, but of the residual air. This method not only encourages the patient to breathe easily, calms his fears, and reduces the shock, but has a tendency to mitigate, if not to absolutely control, those reflex muscular excitabilities, which, in the shape of tetanic spasms of the respiratory muscles — cough and vomiting — are so apt to interrupt and endanger an otherwise peaceful sleep.

As soon as the ether vapor occupies the lungs, and when primary anæsthesia occurs, the cone or other apparatus can be brought in contact with the face. The patient then breathes without difficulty the denser ether vapor. This is what may be called the gradual and rational method, the only so-called lost time being the period before primary anæsthesia is established.

It might appear to be absurd under the circumstances to dwell on the advantages of the latter procedure were it not for the fact that the rapid-drenching, struggling, method is the one most in vogue with the junior assistants in our hospitals.

And this leads me to refer in passing to these gentlemen in connection with some of the abuses we have to consider. They are generally juniors, almost always inexperienced, and therefore quite self-confident. It is not so

much their fault as it is that of the men who should teach them their duties. It is notoriously true that no responsibility of equal importance is more lightly considered and less preparation made for it than that connected with the administration of an anæsthetic. By the time a young man learns passingly well to give ether, his place is taken by a fresh hand, and so on, term after term, and year after year, until the operator, constantly annoyed by interruptions and threatened accidents, accepts the situation as one which apparently admits of no easy remedy.

Very many of the abuses of ether are chargeable to faulty administration of the drug. They begin wrongly and generally end wrongly. I say it in all meekness of spirit, for many a time have I been quietly rebuked by the amused surprise of members of my hospital staff when I have offered a criticism on what, from a traditional standpoint, they consider a very important matter.

As if to atone for carelessness and inattention during the administration of the drug, they are more than ready to abuse the patient by fussiness and over-concern regarding trivial occurrences. Then comes in the sin of commission to atone for that of previous omission. Let the patient miss a respiration or two, the jaw is pushed forward, or the tongue pulled out, or the chest punched for artificial respiration. All of which is as unnecessary as the constant caressing of the eyeball, or the forcible, almost brutal, control of the muscular jerkings of the patient. In the vast majority of cases, if the patient is carefully and evenly kept under ether, the less he is meddled with the better, and the less force that is used upon him the less trouble he will give and the better he will be afterward.

Aside from keeping the patient the shortest possible time under ether, there is nothing of more importance than the steady and even method of its adminis-

tration. The administrator should watch his patient as carefully as does the engineer his engine, and should appreciate the slightest indication of a faulty stroke or irregular pressure. The difference between this and the interrupted method is that between the results of a refreshing sleep as contrasted with the grim experiences in fighting a nightmare. As a consequence, the shocks are diminished all along the line. A steady strain is always born better than a succession of jerks. Everything should be done to keep the patient quiet. Even the reflex muscular movements should be passively rather than actively controlled. Nothing tends to excite a patient more, when partially under ether, than to use direct force in restraining him, or in speaking harshly to him. In fact, it is a good rule for the operator and assistants never to indulge in any conversation during the partially insensible period of the patient, as the hearing is the last sense to succumb to the narcosis.

When full anaesthesia is established and the condition is carefully maintained, the patient is apt to remain quiet during the entire operation, giving the assistants but little trouble. It is oftentimes the unnecessary interruptions which grow out of officiousness of attendants which prove the exceptions to the rule. There are many phenomena that mean nothing, which are incidents rather than accidents, but which are constantly magnified into undue importance. For instance, nothing is more common than a complete stoppage of respiration for an instant just before complete anaesthesia occurs. This is so apt to alarm the novice that he is inclined to punch the patient's chest, forcibly pry open the clenched teeth, slap his face, and hurriedly go through with efforts at artificial respiration. If he waits a few seconds and gives the patient a chance, there will be a full inspiration, and the respiration will go on as easily and naturally as before.

Most of the abuses attending anaesthesia are occasioned by carelessness on the part of the administrator in either giving too much or too little of ether. But in spite of good judgment and care, more or less trouble sometimes ensues. Many patients bear ether badly, and in operations of emergency we cannot select our cases. Bronchorrhœa is often-times very distressing, even with patients who have no lung trouble. But even this condition is modified and mitigated by an easy and uninterrupted administration.

A few words may be said here in regard to the prevention of the real accidents in connection with mechanical arrests of respiration.

Vomiting is always a bugbear. There are apparently no rules for its prevention. Patients with full stomachs and with empty stomachs alike suffer from it. The rule is always to have the stomach empty before etherizing. The possibility of food lodging in the trachea is always to be borne in mind, but this accident very rarely occurs. I have often been compelled to operate upon a patient after he has had a full meal, but never experienced more than a temporary trouble from vomiting. Simply lowering the head and turning it to one side are all that is required. After this the disposition to further vomiting is often prevented by deepening the anaesthesia.

Whenever anything unnecessary is done for a patient who is helpless, it amounts to an abuse of the situation. When we consider it from such a standpoint, there are more abuses than we can count on our fingers within the decimal range.

Patients complain of sore cheeks and necks for days after the operation, because the administrator, for perhaps an hour at a time, had been bracing his thumbs against the angles of the jaws in the fear that the epiglottis might elude his vigilance and shut up shop, or that the unruly tongue might dodge

too far backward into the pharynx. This constant bracing of the jaws is one of the recognized accomplishments of the anæsthetizer. It has the portentuously calm assurance of readiness in prospectively dreadful emergencies. The patient, in fact, appears to be safe against any accident so long as the thumbs of the man at the helm hold out. In truth, whatever can be done in pushing forward the lower jaw can be done quickly, effectively, and without force. The same may be said in regard to pulling out of the tongue. When that organ is curled backward so as to impede respiration it can be gently drawn forward for an instant, and that is all sufficient. Traction on the tongue has less good effect than is generally supposed. The action is limited by the frænum in front and the anterior faucial pillars behind, and is only useful when the dorsum of the organ is curled upon itself, and when there is a general relaxation of the sublingual muscles by a flexing forward of the chin. Generally under the latter conditions the simple elevation of the chin and extension of neck will promptly relieve the patient and save his tongue from the stretching and scraping of clawed forceps. In connection with this point it may be interesting to refer to some recent experiments of Dr. Benjamin Howard, of London, by which he attempts to establish a simple and available method of elevating the epiglottis by forcibly extending the neck and head backward. He claims by this means the hyoid bone, the attached hyo-epiglottic ligament, and the genio and myo-hyoidean muscles become fixed points, when the epiglottis irresistably moves upward and the entire pharynx becomes enlarged throughout. I have not had occasion to try this method, but refer to it in passing as possibly affording assistance when other means may fail.

In considering the immediate and after effects of ether, the fact cannot be too strongly impressed that, all other

things being equal, the less we give of the drug, and the shorter the period of profound anæsthesia the better. A patient should not be any longer under its full influence than is actually required for the performance of the really painful part of an operation. The lack of this precaution in subjecting the patient to an extra shock has sometimes led to fatal results which have been unjustly laid to ether. On the other hand, there should be no excuse, short of actual danger to life, for allowing the patient to suffer any pain during the operation.

There is often considerable difficulty in anæsthetizing patients who have been addicted to alcoholic stimulants. They are more apt to be violent and rebellious under restraint, and a longer time is usually required for anæsthesia to declare itself. In such cases it is well to administer an hypodermic injection of morphine ten to fifteen minutes previous to etherization. Under these circumstances the patient comes not only more quickly under the anæsthetic, but the effects of the latter are prolonged by the morphine. In fact, a proportionally less quantity of ether is required, especially during the less painful parts of an operation, and not unfrequently the ether can be dispensed with altogether, the morphia taking its place. This is of especial value in lengthy operations, in which it is necessary to reduce the shock of anæsthesia as much as possible. This mixed narcosis is also of great use in those cases which, by frequent operations, have developed a tolerance forether. This latter condition was strikingly illustrated in a case in which twenty-two etherizations were necessary for a series of plastic operations performed at different times during a period of three years. In that instance, without morphine, nearly a full hour was required, while but half that time was consumed when morphia was used.

It is not the purpose of these remarks to refer in detail to many of the dis-

greeable sequelæ of anæsthesia, which last for varying periods after its administration. Among these may be simply mentioned protracted nausea, more or less persistent bronchorrhœa, headache, giddiness, suppression of urine, and choreic symptoms. Aside from proving that ether is a powerful drug, their occasional occurrence emphasizes the great importance of care and limit of time in its use. It is well conceded that etherization is sometimes dangerous when albuminuria exists, or when there is embarrassed respiration, the result of empyema, and in some forms of heart trouble, and that very often, choreic symptoms occasioned by etherization last for months afterward. I am convinced that most of these sequelæ are due to careless or too heroic etherization.

While it is fair to assume that ether is a safe anæsthetic, the exception to the rule obtains much oftener than is reported. Every surgeon finds himself from time to time in a very tight place, in spite of the greatest care on the part of the administrator. It is only the conventional idea that a patient has no business to die under ether that allows the fact of an accident to go by default. It is mentioned casually, perhaps, but that is all. We have all been there and gone on. Under such circumstances each operator has his own methods. Personally, aside from straightening the tongue and opening the glottis by closing the mouth and gently pressing the lower jaw forward, I believe in the efficacy of inversion of the body and judicious attempts at artificial respiration. I have occasionally used nitrite of amyl, by inhalation, with striking benefit, but have never seen a

case in which I was willing to try the galvanic battery. I have an impression, shared by many others, that the battery, as a rule, does more harm than good.

In order to avoid many of the abuses of anæsthesia, to which we have referred, we may offer the following conclusions, upon which a fuller discussion may profitably turn:

1. In commencing the administration of ether, the gradual method is to be preferred.

2. Its employment allows the lungs to empty themselves of residual air, prevents coughing and struggling, and places the organs in the best possible condition to receive and rapidly utilize the ether vapor.

3. After the stage of primary anæsthesia is reached, the more pure ether vapor the patient breathes the better.

4. The shorter the time of anæsthesia and the smaller the amount of ether used, the less likely are the unpleasant sequelæ to occur.

5. The more evenly it is administered the less shock to the patient.

6. Anæsthesia should be entrusted to experienced administrators only.

7. Many of the fashionable efforts to resuscitate patients are not only useless, but harmful.

8. The minimum amount of force should be employed to restrain the muscular movements of the patient.

9. Mixed narcosis is often advisable for prolonged operations.

10. The utility of the galvanic battery in threatened death is yet to be proven.

11. The most trustworthy means of resuscitating desperate cases are artificial respiration, hypodermic stimulation, inhalation of nitrite of amyl, and inversion of the body.—*Med. Record.*

JURISPRUDENCE PRIZE—Dr. C. Mey-mott Tidy has been awarded the Swiney prize, consisting of a silver cup and

100 guineas, by the Society of Arts and the Royal College of Physicians and Surgeons, for work in jurisprudence.

TAR AND APOMORPHINE IN THE TREATMENT OF WINTER COUGH.

BY WILLIAM MURRELL, M. D., F. R. C. P., LONDON, ENG.

For some time past I have used tar and apomorphine with considerable success in the treatment of winter cough. This complaint derives its importance, not from its fatality, but from the fact that it returns year after year with unvarying regularity, rendering the life of the patient miserable, and incapacitating him from following his avocations. We recognize it clinically, being only too familiar with its salient features, although curiously enough it corresponds to no definite pathological condition, and may be said to be of a somewhat composite character, including, as it does, cases of bronchial catarrh, chronic bronchitis, with or without emphysema, bronchiectasis and a small percentage of quiescent or arrested phthisis.

The literature of tar as a remedial agent is extensive. The works of Ax-tius and Roberg, which appeared respectively in 1679 and 1714, call for but passing notice. The most solid contribution to the subject is the remarkable work of the Right Reverend Dr. George Berkeley, Lord Bishop of Cloyne, entitled "Siris, or a Chain of Philosophical Reflexions and Inquiries concerning the Virtues of Tar Water and divers other subjects connected together and arising one from another." The first edition was published in 1744, and the second, "improved and corrected by the author," in all probability in the following year, although it bears no date on the title-page. It appeared first in Dublin, was reprinted in London, and was subsequently translated into French, German, Dutch, Swedish and other languages. It covers 176 closely-printed pages, and is divided into 368 sections. Copies of it are now rare, but it is still occasionally to be met with on second-hand book-stalls both in London and Paris. The learned

writer says: "In certain parts, tar water is made by putting a quart of cold water to a quart of tar, and straining them well together in a vessel, which is left standing till the tar sinks to the bottom. A glass of clear water being poured off for a draught, is replaced by the same quantity of fresh water, the vessel being shaken and left to stand as before. And this is repeated for every glass, so long as the tar continues to impregnate the water sufficiently, which will appear by the smell and the taste. But as this method produceth tar water of different degrees of strength, I chuse to make it in the following manner: Pour a gallon of cold water on a quart of tar and stir it and mix them together with a ladle or flat stick for the space of three or four minutes, after which the vessel must stand eight and forty hours, that the tar may have time to subside, when the clear water is to be poured off and kept for use, no more being made from the same tar, which may still serve for common purposes."

The author continues: "Having tried it in a great variety of cases I found it succeed beyond my hopes; in a tedious and painful ulceration of the bowels, in a consumptive cough (as appeared by expectorated pus), an ulcer of the lungs, in a pleurisy and peri-pneumony. I never knew anything so good for the stomach as tar water; it cures indigestion and gives a good appetite. It is an excellent medicine in an asthma. It imparts a kindly warmth and quick circulation to the juices without heating, and is therefore useful not only as a pectoral and balsamic, but also as a powerful and safe deobstruent in cachectic and hysterick cases. As it is both healing and diuretic, it is very good for the gravel. I believe it to be of very great use in a dropsy, having

known it cure a very bad anasarca in a person whose thirst, though very extraordinary, was in a short time removed by the drinking of tar water."

This paper, by the author of the "Minute Philosopher," was followed by a number of pamphlets in reply to it, the best known being "Anti-Siris or English Wisdom Exemplify'd by various Examples, but particularly the present General Demand for Tar Water, on so *unexceptionable* Authority as that of a R——t R——d Itenerant Schemist and Graduate in Divinity and Metapisicks. In a letter from a Foreign Gentleman at London to his Friend Abroad," and "A Cure for the Epidemical Madness of Drinking Tar Water from Ireland. By a certain R——t R——d Doctor. In a Letter to his L——P. By T. R."

This second production is usually attributed to Dr. Thomas Reeve, and is well worth reading. Bishop Berkeley, in 1747, published "Two Letters on the usefulness of Tar Water in the Plague," and this was followed, some five years later, by "Further Thoughts on Tar Water." Amongst other works which appeared about the time may be mentioned Hale's "Account of Some Experiments and Observations on Tar Water," and the "Programma quo infusum Picis liquidæ aquosum declaratur," of Quelmanz.

In 1823 Sir Alexander Crichton produced a work entitled "Practical Observations on the Treatment and Cure of Several Varieties of Pulmonary Consumption, and on the Effects of the Vapour of Boiling Tar in that Disease," in which he gives details of some wonderfully good results. He points out that "tar as it comes to market is generally found to be contaminated with more or less pyroligneous acid, which fluid, being very volatile, is disengaged long before the tar boils, and as it is irritating and hurtful to the lungs, must be got rid of or arrested. For this reason, the tar, before being brought

into the bedroom of the sick, ought to be boiled for a few minutes in the open air and then to every pound of it ought to be added from one to two ounces of the subcarbonate of potash." He points out that the simplest way of impregnating the air of a room with tar is to put "about a pint or upwards of the prepared tar into a flat dish, of iron, copper or earthenware. This is to be placed on a stand about a foot from the ground, so as to admit a suitable lamp under it. The apparatus must not be placed too near the patient at first, because it is impossible to say beforehand how it may affect him, and in what degree of force he can bear it. In whatever part of the apartment it is placed, the air is soon charged with the vapour."

In '60 Sales-Girons published a work of some 500 pages entitled "Traitemen de la Phthisie Pulmonaire par l'inhalation des liquides pulvérisés et par les fumigations de Goudron," in which a similar mode of treating chronic bronchitic affections is advocated. The results, judging from the statements of the author, seem to have been eminently satisfactory.

The drug referred to is not coal tar, but wood tar, the *pix liquida* of the British and the United States "Pharmacopœias." It is prepared by destructive distillation from the wood of *pinus sylvestris*, the Scotch fir, or from the *pinus palustris* of the Southern States of America. The wood is cut into billets of a convenient size, which are heaped up so as to form a stack or pile, and covered with earth, as in the process of making charcoal. The stack is built up upon a circular mound of earth higher at the circumference than in the center, where there is an opening communicating by a conduit or outlet with a shallow ditch surrounding the mound. A light is applied at the top, and the whole mass is allowed to burn slowly, so that the resinous matter is melted out by the heat. The tar runs

down the hole in the center, and passes along the conduit into the ditch, from which it is transferred into barrels. Immense quantities are prepared in North Carolina and Virginia, enough to tar all the rails in the States, and cure the coughs of the world besides.

In my earlier observations the tar was prescribed in the form of pills, each containing two grains. Patients suffering from chronic bronchitis were directed to take two of these pills every four hours. At first the pills were prepared with "bread mass," made as follows:

"Wheaten flour, one part; glycerin, five parts, by weight. Mix and beat together until a jelly is formed; when cold add six parts of wheaten flour, and beat well together."

The pills were large and generally unsatisfactory, and the patients objected to take them. I next tried mixing the two grains of tar with a grain of wax and two grains of powdered liquorice root. These pills were bulky and nasty, and they could not be coated, as the spirit commonly used in the process dissolves out the tar. Subsequently the pills were made by a much simpler method—by mixing with the tar half its weight of lycopodium, the sporules of *lycopodium clavatum* and other allied species. This formula was found to be fairly satisfactory, and after a good many trials it was adopted and introduced into the Westminster Hospital "Pharmacopœia."

Tar is very conveniently prescribed in the form of perles or capsules. The perles contain from two to three grains in each, and the capsules four or five grains, although they vary somewhat in size and capacity. There are several other preparations of tar in use on the Continent, where it is a favorite remedy. The Dragées de Christiana au Goudron de Norvège are elegant little bon bons, each containing five grains. The worst of them is that they are too expensive for hospital use.

The pills were satisfactory, but I was anxious, if possible, to obtain a good fluid preparation, so that the tar might be administered in suitable cases in combination with other remedies. After a good many trials I decided to use the syrups picis, or syrup of tar, of the United States "Pharmacopœia." The directions for its preparation are somewhat complex, but should be strictly followed. The preliminary washing with cold water is necessary to get rid of the acid principles, which, if allowed to remain, would prove irritating. It is an inexpensive medicine, costing practically nothing but the trouble of making. The dose of this preparation, which may be prescribed as syrups picis liquidæ, or sirop de Goudron, is a tablespoonful given frequently. It is reputed to be a 4 per cent solution, but it is difficult to say exactly how much is taken up, as, from the addition of water, the tar weighs after the process rather more than it did before. It is palatable, but it tastes distinctly of tar, and some patients dislike it. For these hypercritical individuals it may be flavored with syrup of Virginian prune. A mixture of two parts of syrup of tar and one part of syrup of Virginian prune is an ideal cough mixture. It has a sweet, agreeable taste, and patients, as a rule, like it. When the cough is very irritable, and there is very little secretion, the addition of three minimæ of liquor morphinæ acetatis will be found most useful.

I have used with some success Blount's aromatic oil of tar, which is apparently a solution of tar in old Jamaica rum. The results have been good, and the preparation is popular with patients.

When a more decidedly expectorant action is required I add a small dose of hydrochlorate of apomorphine, about one-tenth of a grain. Everybody knows that apomorphine is a powerful emetic, especially when administered hypodermically, but it is not so generally

known that it is one of our best emetics. I use the 2 per cent solution of the British "Pharmacopœia," the "injectio apomorphinæ hypodermica," and I do not expect it to be "freshly prepared," having found, from careful observation, the change of color which it undergoes on keeping in no way impairs its properties. From three to six minims may be given frequently without exciting nausea, and many people take ten without difficulty. I have now under treatment about thirty patients with winter cough, all of whom are taking the tar and apomorphine.

I append a short account of a few typical cases, which may be of interest as examples of this mode of treatment:

CASE I.—Harriet H., aged forty-seven, keeps house for her husband, but was formerly in the green grocery line, and for the best part of her life served in an open shop. She had suffered from a bad cough for five or six years, but this winter it is worse than ever. It comes on in severe paroxysms, a dozen or more in the day, each lasting ten minutes or longer. It is always increased by fog or smoke, and her husband has to go into the back yard if he wants to smoke when he comes home. The expectoration is profuse, white and frothy. There has never been any haemoptysis. Her breath is short and she has much difficulty in getting up stairs. On examining the chest it was found that there was bubbling rhonchus at the bases of both lungs. On January 8 the patient was ordered two two-grain tar pills, to be taken every four hours. On the 15th she reported that she was much better, and that the paroxysms of cough were less frequent and of shorter duration. On the 22d she stated that the breathing was better, and that she had improved in every way. On the 29th the cough had left her and the expectoration had ceased. She was given a tonic and ceased attending.

The next was an exceptionally obstinate case, the tar having to be taken, with short intermissions, for two months.

CASE II.—Sophia H., came to the hospital and complained that she had had a cough for fourteen years. It always came on early in November and lasted until the summer was well advanced. The fits of coughing were very severe, and she had them almost every hour. There was always a good deal of expectoration, sometimes watery and sometimes yellow and thick, so as to necessitate the use of three or four pocket-handkerchiefs both night and day. There was great shortness of breath, and the patient had difficulty in walking even half a mile. It was impossible for her to get upstairs, so that she was obliged to have a bedroom on the ground floor. She complained that she had no appetite, and that she felt low-spirited, weak and ill. Her father and mother had both died of consumption, and all her brothers and sisters suffered from winter cough. On examining the chest, it was found that the percussion note was poor, and that the movements were impaired, but there was no actual proof of the existence of consumption. On November 13 she was ordered two grains of tar in a pill, to be taken every four hours. On the 20th she reported that the cough was easier, and that she had slept better. On the 24th the expectoration was less and the breathing was easier. On the 27th she caught a fresh cold from incautious exposure to night air and fog, and there was a relapse. On December 1 she was better again, and volunteered the statement that the pills greatly relieved the urgent symptoms. During the whole of this month she continued steadily with the treatment, and on January 11 it was found that she was almost free from cough, that the expectoration had practically ceased, and that the breathing was quite as easy

as it was in the summer. She was then given cod-liver oil and hypophosphate of lime, and was discharged, cured.

The following case illustrates the benefit which may be derived from the judicious use of apomorphine:

CASE III.—Daniel M., aged forty-six, a carpenter, came to the Westminster Hospital on November 25, complaining of winter cough, from which he stated that he had suffered many years. It always came on early in November, and lasted the winter through. It troubled him more or less all day, but was worse at night. He expectorated; was thick, copious and tenaceous. He was so short of breath that he was quite unable to work. The physical signs were those of emphysema, with moist rhonchus at the bases of both lungs. He was ordered a mixture of senega and ammonia, which did him little or no good. On December 14 the prescription was changed to syrup of tar, two drachms every four hours, and there was an immediate improvement, especially as regards the cough. On December 21 the dose of the tar was increased to four drachms, with three drops of the apomorphine solution in each dose. The improvement was still more marked, and the patient expectorated with much less fatigue or difficulty. He was instructed to take the medicine every alternate hour, and this he did without inconvenience. On January 25 the dose of apomorphine was increased to five minims, and on February 8 to eight minims, the frequency of administration remaining the same. The symptoms were at once alleviated, and a week later the patient was discharged, practically cured.

In the following case the tar cured not only the winter cough, but a persistent psoriasis, from which the patient had suffered for many years.

CASE IV.—Henry B., aged sixty-six, a tin-plate worker, came to the hospital complaining of a cough, which, he stated had troubled him every winter for six years. The paroxysms were very violent, and he had had as many as twenty in the day, each lasting five minutes or more. He expectorated freely, the phlegm being sometimes frothy, and at others thick and yellow. He said he was very short of breath, and had often to stop a dozen times in walking a mile. He attributed his illness to working in a hot shop and then standing in a draught to get cool, a custom which he had followed for many years. He had lost flesh considerably, and on examination it was found that there was large, bubbling rhonchus all over both sides of the chest and back. His arms and legs were almost covered with large patches of psoriasis, from which he had suffered for nearly ten years. He was obviously a good subject for the tar treatment, and was ordered two two-grain tar pills every three hours, to be taken for a fortnight. At the expiration of that time he returned and said that both the cough and the rash were completely cured.

In conclusion, I may mention that a winter cough patient who has been under my care eleven years, and has tried every remedy which has been suggested, says that nothing does him so much good as two teaspoonfuls of syrup of tar and ten minims of the apomorphine solution every three hours.—*Med. Register.*

DR. TANNER, the faster, contends that Edgar Allen Poe was subject to catalepsy or trance, and that such a

suspension of animation, not drunkenness, was the cause of the poet's death, if, indeed, he was not buried alive.

THE PEORIA MEDICAL MONTHLY.

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THOMAS M. McILVAINE, A. M., M. D., EDITOR.

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EDITORIAL.

EXPLANATORY NOTE.

Owing to the severe and, up to the present date, continued illness of the editor—Dr. McIlvaine—this issue has been much delayed, and the editorial department necessarily omitted. We are pleased to state that Dr. McIlvaine is convalescing, and will be able to resume his work within a week or two.

He especially requests that the friends of the MONTHLY will send in at once some original material — reports of cases, etc.—for the next number, which will materially assist him when assistance is most needed.

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PERISCOPE.

TREATMENT OF PHthisis. — Berlater reports (*Centralblatt fur Klinische Medicin*, September 8, 1888), 8 cases of tuberculosis treated with *aniline*. Of these, 4 were in the early stage, 3 in the beginning of the last stage, and 1 was so far advanced in the disease that his death was expected in a few weeks. All these cases were cured or improved under the aniline treatment. The fever disappeared, the appetite was better, there was increase of weight, improvement of physical signs, and there were fewer bacilli in the sputa. The aniline was given in doses up to 12 drops, with a few drops of alcohol, and by inhalation of 25 or 30 drops. Some of the patients took, altogether, as much as

two and a half ounces of aniline. The administration of the remedy should be interrupted for a few days from time to time, especially if the patient complain of lassitude and weakness in the legs. A greenish-yellow color of the skin may appear, but this disappears when the aniline is withheld for a few days.

Gager has recently published records of 17 cases of phthisis with *hydrofluoric acid*. For an inhalation chamber he used a compartment of a wooden hut, well boarded, with a close-fitting window sash and door; its capacity was about 250 cubic feet. In this space the patients, one, two or three at a time were seated, their clothes being protected by sheets from the injurious effects of the

acid. The gas was manufactured in an adjoining chamber, and conveyed to the ceiling of the inhalation chamber by a leaden pipe.

As a rule, the patients were ordered one sitting of an hour's duration daily; occasionally two sittings were given. In order to ventilate the apartment, it was always necessary to open the door and window from three to eight times during the hour.

All the patients subjected to this treatment presented tubercle bacilli in their sputa; and Gager's investigation was specially directed towards the anti-bacillary property of the acid.

All renal cases were excluded from this treatment. During the first three sittings all the patients complained of smarting and itching in the nose, of smarting in the eyes, and often of sneezing, which lasted for days. With some patients there was increase of cough, and even streaks of blood in the sputa; and the inhalations had to be stopped for some days on that account.

Of the 17 patients, 13 found their appetite increased after the inhalations. In one case there was slight epistaxis.

In 5 cases the bacilli disappeared from the sputa, and there was a marked improvement in the symptoms. In 7 cases the physical signs were distinctly improved. In 12 cases the body weight was increased, but the amount of increase appeared to bear but little relation to the improvement in the general condition. For example, in one case in which the bacilli disappeared and in which the physical signs improved there was no increase in the weight at all, and in another there was no improvement, though the weight increased almost four pounds.

Three of the patients had pyrexia; one lost it entirely, together with all the bacilli and expectoration; in the second case the fever decreased, and in the third it continued as high as ever. One of the patients had night sweats, but they disappeared entirely.

In 7 cases the vital capacity increased to the extent of from 3 to 27 ounces. In 2 cases somewhat severe irritation of the laryngeal mucous membrane was set up, thus showing that this method of treatment is contra-indicated in cases of laryngeal phthisis—at all events, only a very small quantity of the gas can be given.

In 5 cases, including one in which laryngeal complications existed, no improvement could be noticed; one very advanced case died. No evil consequences were presented in any of the cases.—*Lancet.*

ILLINOIS STATE BOARD OF HEALTH.—Since the Board has been somewhat roundly abused and misrepresented by some of the newspapers in Illinois and other states, the following, taken from the recent message of (now) Ex-Governor Richard J. Oglesby, is of no little interest:

"The intelligent and faithful discharge of the duties imposed by law upon the State Board of Health, and the benefits which accrue therefrom to the commonwealth, sufficiently attest the wisdom of the Legislature in the creation of this organization. From the vast field covered by its labors it is only possible, in this connection, to single out for mention a few of its most important works. It is charged by the constituting act with the supervision of the interests of the life and health of the citizens of the State, and to this end the Board has addressed its efforts more particularly to the limitation and—so far as is practicable—to the prevention of epidemics of contagious and infectious diseases.

"It is a matter of record—a fact which I understand has now passed into the authentic history of epidemics in this country—that the labors of the Board in this direction resulted in a saving of nearly \$3,500,000 to the people of the State in 1881 and 1882, when small-pox was epidemic. Though the pre-

ventive and protective measures then established and since enforced, there has been no repetition of that disease in an epidemic form.

"The wise and intelligent policy of the board on the subject of quarantine has been of great value to the material interests, not only of Illinois, but of the whole Mississippi Valley. While vigilantly guarding against the introduction and spread of the dangerous, contagious and infectious diseases, it secures the least interference with commerce and travel, and so averts unfounded panics and prevents loss and interruption of business and industry. During the past few months a striking illustration of the value of this policy was afforded by the action of the worthy Secretary of the Board, who refused to sanction any expenditure of money from the public treasury in the maintenance of quarantine restrictions, which his wide and varied experience and scientific knowledge enabled him to pronounce unnecessary for the State. His firmness in this instance alone prevented the loss of thousands of dollars, besides great inconvenience to travelers and vexatious interference with business, and the example thus set materially helped to check the ruinous and needless quarantine enforced in other States."

The Governor then speaks of the sanitary survey of the State, begun in 1883, and still in progress; of the careful analyses now being made of the water supply of the State; and of the benefits that have accrued from the enforcement of the Medical Practice Act.

—*Med. Jour and Ex.*

INTERMITTENT HYDRONEPHROSIS.—
The Wiener Medizinische Wochenschrift, No. 48, reports the concluding remarks of Landau in the session of the Medizinische Gesellschaft in Berlin on the 17th of October, 1888, on intermittent hydronephrosis, due to obstruction of the ureters. He alludes to an only recently observed and re-

markable cause—to spasmodic contraction of the ureter, which might be sufficient to result even in complete anuria.

He remarks especially of two other causes of closure of the ureters, first, resulting from traction and compression against the arcus pubis; second, from torsion or angular insertion of the ureter at the hilus.

Although Virchow called attention as early as 1846 to the possibility of a prolapsed uterus compressing the ureters against the pubic arch by experiment on the cadaver, yet Landau has so far been unable to verify this condition as a cause of hydronephrosis during life.

The other two causes of obstruction leading to hydronephrosis he regards as being of comparatively frequent occurrence, being due to a gravitation of the kidney, while that part of the ureter next to its insertion at the hilus remains fixed. The resultant stasis obtains until the kidney returns to its normal relations during the horizontal position; this condition of things recurring again and again, until finally the elasticity of the real pelvis is lost and it is transformed into a huge sac. Landau further reflects on the causes of an angular insertion of the ureter. Virchow regards it as congenital; Simon is of the opinion that it is the *result*, not the *cause*, of the hydronephrosis; Landau considers the condition of movable kidney as the etiological fact in the production of an angular insertion of the ureter, or the possibility of torsion or kinking of the ureter, and notes the frequency of its occurrence in females, generally on the right side, supporting his opinion by five cases under observation.

Concerning the symptomatology of intermittent hydronephrosis, the five patients, who are all females, complained of temporary vague sensations—sensations of weight, as of a foreign body, but no particular sensation relating to the urinary secretion or excretion. One patient had paroxysmal pains re-

minding one of renal colic. The symptoms as a rule were such that they might easily have been regarded as hysterical. Objective symptoms are of necessity wanting at first, and not until the tumor has attained a sufficient size can we diagnose the same as hydronephrosis, the intermittent character of which will be seen after repeated observation of the patient.

But even when the existence of a tumor is plainly made out, our means of differentiation may be insufficient; thus Landau in all five cases failed to elicit fluctuation. On the contrary, the tumor was remarkable for hardness; neither must we expect to find urinary salts in the aspirated fluid because they are resorbed if stasis has obtained for a certain time; the fluid then will be light and clear, without formed elements, without chemical properties—very much like the contents of an echinococcus sac. In two cases only urinary salts were traced, once urea and once uric acid. The acid reaction of the fluid is the only diagnostic point, and is certainly indicative of urine, as it is the only fluid possessed of acidity.

In relation to therapeutics, Landau regards nephrectomy as contra-indicated. A hydronephrosis of one kidney is not a necessarily dangerous condition, *per se*; yet it is not to be disregarded, as it may eventuate in pyonephrosis; furthermore, any intermittent hydronephrosis may become permanent and by concomitant disease of the other kidney result in fatality. In such a case operative interference becomes necessary.

Landau has in two cases resorted to nephrotomy; in one of the cases a permanent fistula resulted, the same having existed for eight years without inconvenience; in the other case the fistula healed up and resulted in a perfect cure.

Landau notes the result of another mode of operating, analogous to Hahn's method (*Centralbl. fuer Chir.*, July 23, 1881), which consists in stitching the

sac to the skin. Two patients upon whom such an operation had been performed are still under observation; in taking a favorable position they were able to evacuate the sac into an attached recaptacle, thus suggesting a suitable orthopaedic apparatus.—*N. A. Practitioner.*

INFANTILE CONVULSIONS—Although the treatment of convulsions in children is a subject upon which every practitioner considers himself an authority, yet a good article upon the subject is always worth the reading. In the *Journal of the American Medical Association*, February 9, 1889, Dr. Love discusses the whole matter briefly. The first duty of the physician is to find the cause of the paroxysm, and, if possible, to remove the cause; not, as Henoch, the Berlin authority, teaches, treat the fit first, and when it is over find the cause. Recurring convulsions, from whatever cause, should be prevented, since they may lead to chronic epilepsy or idiocy. Heredity is a frequent cause, a peculiar liability to loss of equilibrium of the nervous system being handed down. Most attacks of convulsions are due to reflex excitement. To combat them the general health of the patient and existing chronic enfeebling disease must receive attention and the habits of life must be regulated. If teething is a cause of the spasms, the gums must be lanced. The removal of irritating food must be secured by emesis, enemata (of a drachm of glycerine), calomel purge and proper feeding. (We would caution against the simultaneous use of enema and emetics). The ears should be examined for foreign bodies. The mother's temper should be regulated. He has never seen a case which could be with certainty traced to worms. He once lost an infant in which the convulsions were probably caused by cutting off (in weaning) of the morphia which it had been used to receiving in the milk of its morphia-eating mother. Circum-

cision should be done, if necessary. A very important point is the diagnosis between attacks caused by the above-mentioned agents and those which accompany the first stages of fevers. The doctor should always, in convulsions of infants, pass a good thermometer into the rectum. If high temperature is found, due to the onset of eruptive fevers, pneumonia, pleurisy, enteritis, meningitis and malarial or typhoid fever, not hot baths and stimulants, but gently cooling baths and proper treatment for the fever are indicated. To relieve and prevent convulsions in infants he has used acetanilide. It may produce a rash, but quiets the patient and reduces temperature.—*Md. Med. Journal.*

HEREDITARY SYPHILIS.—According to the Vienna correspondent of the *British Medical Journal* for January 12, 1889, at a recent meeting of the Imperial Royal Society of Physicians of Vienna, Professor Neumann read a paper on "Hereditary Syphilis." The questions with which the lecturer dealt were the following:

1. What is the condition of the offspring when the father and mother were healthy at the time of conception, and the mother became infected at a later date (pure post-conceptional syphilis)?

2. What is the effect of post-conceptional syphilis with reference to the offspring when the father was already syphilitic at the time of procreation?

3. What is the effect of post-conceptional syphilis with reference to the offspring when the condition of the father's health at the time of procreation was unknown, and the mother was healthy at the time of conception, and became infected at a later day?

4. What is the condition of the offspring when the infection and the conception took place at the same time?

And, 5, when the infection of the parents occurred before conception?

Professor Neumann's paper was based on cases most of which he had observed during eight years in his clinic. Of these, only one hundred and two were available for the purpose he had in view, as accurate data concerning the offspring could not be obtained in the rest. The physicians of the three obstetric clinics of the General Hospital and those of the Vienna Foundling Hospital also took an active part in the investigation. With regard to pure post-conceptional syphilis, Professor Neumann had observed eleven cases; of these, five were healthy, and the rest, in part, presented the appearances of syphilis, and, in part, miscarriage occurred. As regards post-conceptional syphilis, where the father was syphilitic five children were found to be healthy, two children were affected with syphilis and in five cases miscarriage had occurred. In the cases of post-conceptional syphilis, where the father was unknown, there were ten healthy, one syphilitic, and seven dead children; two children were still under treatment. In the cases in which conception and infection took place at the same time, fifteen children were healthy, one died of peritonitis, four were syphilitic; the fate of these cases could not be ascertained, and in twenty-one instances still-birth occurred. Among twenty-five cases of syphilitic infection before conception, there were ten healthy children, eight cases of miscarriage, and four of maceration; three were still under treatment. Professor Neumann arrived at the following conclusions:

1. A syphilitic mother may convey the disease to her offspring at any stage of her affection, whether the infection had taken place before or after the conception.

2. A mother who had contracted the disease after conception sometimes transmitted it to the foetus. In the case of pure post-conceptional syphilis the transmission of the affection to the child

was extremely rare, and particularly when the mother had become infected in the last months of pregnancy.

3. When the infection of the mother had taken place after conception, and the father was syphilitic at the time of procreation, the effect on the offspring was greatly intensified; the children in these cases died *in utero*, or were born with signs of syphilis.

4. In the case of post-conceptual syphilis, where the infection was unknown, the proportion was the same as in pure post-conceptual syphilis; syphilis acquired in the last months of pregnancy was usually transmitted to the offspring.

5. When infection and conception occurred at the same time, the children died in one-half of the cases. It was, nevertheless, remarkable that a great part of the offspring remained free of syphilis, in spite of the fact that the disease was in an active state in both the parents at the time of conception. This disproved the assertion that a healthy child could never be born when both parents were syphilitic at the time of conception. On the other hand, the assertion that healthy children were born only when the syphilis of the parents was seven years old, was also negatived.

6. In the case of infection before conception, the period at which conception occurred had to be taken into account; the longer the interval between infection and conception, the more favorable was the prognosis for the offspring.

7. The offspring had the best chance when the mother only contracted syphilis in the last months of pregnancy, while the father was healthy at the time of procreation; the same was also true of the offspring of parents suffering from tertiary syphilis. The offspring had the least chance when infection and conception had occurred simultaneously, or when the father was suffering from recent syphilis at the time of procreation.

8. This last observation also elucidated the question as to paternal syphilis. It was especially these cases in which the father was syphilitic at the time of procreation, and the mothar became infected only after conception, and the child was soon after the infection born in a macerated condition, which proved the extremely injurious nature of paternal syphilis. This was opposed to the observations of Boeck and Dewere, who stated that the child of a syphilitic father was always healthy. These data, concluded Professor Neumann, showed the sad fate of the children of syphilitic parents, as, out of one hundred and nine cases, only forty-four were born healthy, and according to inquiries made by Dr. Friedinger, director of the Vienna Foundling Hospital, only the minority of them lived. Hereditary syphilis must, therefore, be considered one of the most terrible plagues of infant life.—*Ther. Gazette.*

ANTIPYRIN IN THE FIRST STAGES OF LABOR.—We have already alluded to the fact that antipyrin is claimed during the first stages of labor to render the pains less severe, while at the same time not interfering with the progress of labor. Although these claims have not been universally admitted, and we have referred to papers in which the claim is made that it is entirely negative in its action in this respect, some results published by Dr. J. O. Van Winkle in the *New York Medical Journal* for January 5, 1889, go far to substantiate them. He refers to several cases in which antipyrin was employed. The first dose was given when the os was about one-third dilated, except in cases where the pains were very severe from the outset, when it was ordered earlier. Antipyrin, gr. xv, and spt. ammonia, xxx drops, were administered every two hours, during the first stage, for three doses. The temperature and pulse were noted at the time the first

dose was administered, and every hour thereafter until dilatation was complete. In almost every instance the patient said she felt greatly relieved, and this was evident from her behavior. In some cases the patient would fall asleep for an hour or so after the first or second dose. Incidentally it was noticed that the temperature fell from half a degree to a degree and a half Fahrenheit. The pulse became somewhat more frequent and the respiration slightly increased. Occasionally, if the pulse was rather rapid before administering the drug, it decreased in frequency. From statistics as to the duration of labor in cases where it was not employed and where it was employed, it would seem that antipyrin does not increase the duration of labor, but, on the contrary, tends to lessen the first stage on an average of about half an hour, while the second stage remains practically the same, and in no case was there any injury done the mother or child. The author claims that antipyrin very materially lessens the severity of the pains during the first stage of labor, and has never given rise to any alarming symptoms, this immunity doubtless being due to the fact that in its administration it was always combined with a stimulant.—*Ther. Gazette.*

THE OPERATIVE TREATMENT OF HYDROCELE.—The last number of Professor Bruns's *Beitrage zur Klinische Chirurgie* contains a paper on the "Operative Treatment of Hydrocele and its Ultimate Results," in which Dr. Hertzberg, of Tubingen, endeavors to prove the superiority of incision over injection by a record and analysis of forty-six cases, in which Volkmann's radical operation was performed. The youngest patient was 12 years of age, and the oldest 56 years of age; in six cases the hydrocele affected both sides of the scrotum. The operation in each case was performed with full attention to antiseptic details. The vaginal cav-

ity was washed out with a weak solution of corrosive sublimate; a drain tube of medium size was passed through the cavity and brought out through a counter-opening at the lower part of the scrotum, and the seat of operation and the surrounding parts were finally covered by a dry dressing of wood-wool. Professor Bruns practices partial excision of thickened indurated or superfluous tunica vaginalis, but holds that total excision of this membrane is not required, save in very exceptional cases. Care was taken to relieve the vaginal cavity of all products that were supposed to be associated with the disease, and in cases where such morbid conditions existed, deposits and growths were removed from the tunica vaginalis, and hydatid and other cystic growths from the testis or epididymis. In thirty-three cases recovery took place without any signs of local or general reaction. In eight cases there was severe general reaction, with subjective disorder and prolonged fever. Such conditions, which, however, are now but very rarely observed, are the result of interference with primary healing by effusion of blood into the vaginal cavity, of inflammatory œdema of the scrotum, of swelling of the testis, or of suppuration in the perineum or the anterior abdominal wall. In a large majority of the cases collected by Hertzberg the drain-tube and sutures were removed on the fifth or sixth day, and the patient was able to leave his bed at the end of the first, or the beginning of the second, week. The average duration of the stay in hospital was a little over sixteen days. In this respect Volkmann's operation seems at first sight to compare unfavorably with injection of iodine. The usual duration of hospital treatment by the latter method is from eight to ten days, but, it is pointed out, injection is very often followed by tenderness and swelling of the scrotum and effusion into the vaginal cavity, which may last for weeks, and even for

months. All the patients treated by incision and drainage at Tubingen were discharged as cured, and the primary results were all very favorable. By subsequent inquiry and observation Hertzberg has made out that the benefits derived from the treatment have been maintained, and that forty-five out of forty-seven hydroceles treated by cutting operation have been permanently cured. By comparing tables, derived from different sources, of carefully recorded and long-observed cases of hydroceles treated by incision and injection, he finds that the relapses after the former treatment constitute from three to four per cent of the total number of cases, while those after treatment by puncture and injection of iodine amount to eight per cent. In conclusion, Hertzberg expresses it as his opinion that incision is the most rational method of treating hydrocele, especially with regard to the certainty of obtaining a permanent cure, and that in future it will be more frequently practiced, as the appreciation of the value of anti-septic surgery becomes more widely spread.—*London Med. Recorder.*

HAMAMELIS AND HYDRASTIS IN PULMONARY HEMORRHAGE.—One of the weakest points in our therapeutic measures is the treatment of pulmonary hemorrhage. With most cases of hemorrhage from the lungs recovery is rather a matter of good fortune than one for which we deserve any credit, since it is but seldom that the hemorrhage is so severe as to directly and immediately endanger life. It is unfortunately true that, while without controlling the hemorrhage, most of the therapeutic measures now employed simply tend to disturb intestinal and gastric digestion. In the *Therapeutische Monatshefte* for November, 1888, Dr. Koeniger writes that for the last three years he has been employing almost exclusively the fluid extracts of *Hamamelis Virginica* and *Hydrastis*

Canadensis in similar cases. While it is not claimed that these drugs arrest all pulmonary hemorrhages, and while severe hemorrhage is not invariably influenced by them, yet in by far the majority of cases their action is undoubtedly favorable, even after other means have failed. In the cases of periodic hemorrhage from the lungs, the administration of these drugs before the expected hemorrhage has served to prevent its appearance. Likewise he claims that the drugs themselves produce favorable action on the stomach, and may be regarded as forming a good tonic. When the cough is severe he administers two grains of Dover's powder, and this, together with twenty to thirty drops of the fluid extract, is usually sufficient to produce arrest of the hemorrhage.

THE TREATMENT OF ASCITES AND GENERAL DROPSY WITH MILK DIET.—That ascites and general dropsy very often yield to the milk diet treatment is a fact which had been recognized by the native physicians of India from a very remote age. Even in modern times many of the native physicians and quacks treat their dropsy cases in the same way, with at least partial success. They prohibit solid food of every kind, and all articles containing salt. They also prohibit the drinking of water, and make their patients take milk or curd in abundance. But there are a few particulars in connection with this treatment which they do not carefully attend to, and it is for this reason that they do not succeed in many cases.

This plan of treating ascites and general dropsy has received very little attention, the treatment generally recommended being that by watery purgatives, diuretics and diaphoretics, paracentesis being recommended as a last resource in cases of great distention. In many cases purgatives, especially in hot climates, seem injurious; they appear to irritate the stomach and in-

testines of the patients and greatly interfere with digestion. Though an occasional purgative, by removing the accumulated faeces from the intestines and by inducing secretions from the intestinal glands, gives great relief to the general system during the course of treatment, it is held by some that a systematic use of purgative medicines, with a view to remove the dropsical effusions, does more harm than good. In many cases thus treated it is stated that dysentery supervenes; in some places it is looked upon as a fatal symptom in connection with ascites or general dropsy. In the *Lancet* for December 29, 1888, Mr. K. P. Chowdhury states that he has adopted the method of treatment first recommended by Dr. Richards, of treating ascites and general dropsy by the exclusive use of milk diet, and he has met with almost uniform success. The very few cases of failure that have occurred in his experience have been those where organic mischief had proceeded too far to be consistent with the maintenance of life. He publishes details of two cases treated by tincture of iron, infusion of quassia, digitalis, squills and oil of juniper, with milk as exclusive diet. In another case, a drachm of jalap powder was ordered to start with, and milk constituted the diet, with cinchona, dilute sulphuric acid and sulphate of iron. In this case, also, the digitalis, squills and juniper powders were given, and both cases were cured. It seems rather strange that, in view of the very extensive list of remedies employed in these cases, the author should attribute to the milk alone the credit of cure. No one of the various remedies employed can scarcely be claimed to be an inert substance. It is true that the author states that the medicines alone would not produce a cure if the milk diet is not given, and even if they are not confined solely to the milk, recovery is not attained. The author lays stress on the fact that the milk shall be given in very small

quantities, eight ounces being the largest amount allowed at any one time.—*Ther. Gazette.*

RHEUMATISM.—Dr. J. Pollock, in his post-graduate lecture, delivered at Charing-Cross Hospital, and published in the *Lancet*, makes the following interesting statements on treatment:

The treatment of rheumatic fever a few years ago was most satisfactory. I have seen alkalies, quinine, blistering and other reputed remedies tried in a large number of cases, alone or in combination, but without being at all impressed by their value. Some ten or twelve years ago a new and improved method of dealing with the disorder came into operation, the use of salicin as a remedy, which ultimately led to the introduction of salicylate of soda, one of its derivatives.

I cannot say that I have had much success with salicin, though I have tried it in a number of cases, but he must be blind indeed who cannot perceive the great value of the soda salt. There may be some doubt as to whether its use shortens the duration of rheumatic fever, but beyond question it robs the disease of some of its most painful symptoms. In a few days, sometimes hours, the temperature is brought down, the inflammation and pain in the joints subside, and the patient is in most cases practically convalescent.

It is not claimed for salicylate of soda that it will prevent the occurrence of heart complications, or even hyperpyrexia, but it lessens the chance of either mischief by rapidly reducing the fever. It must also be borne in mind that the drug is not an absolute specific. Where shall we find one? It fails to relieve or cannot be tolerated every now and then. But this is no more than what happens with quinine in ague, or iodide of potassium in syphilis. Salicylate of soda sometimes produces sickness, deafness, tinnitus aurium, and a peculiar kind of cerebral disturbance; but these disagree-

able effects quickly disappear on a discontinuance of the drug, and seldom return upon its resumption after a short interval. The salicylate has been charged with producing serious cardiac depression, even causing sudden death; but the evidence on these points is not very clear, and personally I have never witnessed any such effects.

In treating a case of articular rheumatism, the salicylate of soda may be given in doses of ten, twenty, or even thirty grains, every two, three, or four hours, according to the severity of the symptoms and the effect produced. Where there is evidence of a great ascidity, some alkali (five to fifteen grains of the bi-carbonate of potash), may usefully be combined with each dose of the salicylate which is best given in some aromatic water to conceal its somewhat acrid taste. It is important to keep up the action of the drug for some days after the disappearance of fever, as the premature disuse of it is apt to lead to a return of all the symptoms—a so-called relapse.

Towards the close of a case of rheumatic fever, the joints are not unfrequently left rather swollen and painful; it is then that iodide of potassium (internally), and iodine paint (externally) are so useful. When quite convalescent, the patient should have tonics, and especially steel and quinine; and if rheumatic pains linger, the salicylate of quinine, in five grain doses, three times a day, is often of much service.

Other salts of salicylic acid will probably be found useful in the treatment of rheumatism; and lately a new preparation, "salol," has been introduced. It is a salicylate of phenol, and has been used a good deal in America, with, I believe, satisfactory results.

But it may be asked what is to be done in those cases of articular rheumatism in which the salicylates are not successful? Well, it is unfortunate when this happens, but we may fall back upon large doses of salicin, upon alkalies, or

upon the excellent alkaline quinine prescription of Sir Alfred Garrod. Quinine and bicarbonate of potash are rubbed up together with a little mucilage and some aromatic tincture, in such proportions that each ounce and a half of the mixture contains five grains of quinine (in the form of carbonate), and thirty grains of potash. This dose may be given every four hours for as long as may seem desirable.

Of course, all cases of rheumatic fever must be kept in bed, and properly dieted. The most suitable nourishment in the earlier stages is the usual beef tea and milk "fever" diet, but to this may soon be added some farinaceous food, eggs and afterwards fish. Rheumatic fever is a disease of debility, and it is very desirable to keep up the strength of the patient; but in some cases the too early resumption of meat has seemed to be followed by a return of the rheumatism. Further information on this point would be of value. Stimulants are not absolutely necessary, nor often needed, in cases of articular rheumatism; but they may be required at times, and should be administered in accordance with the condition of the patient. The bowels should receive attention, but no active purging is required, especially as movements necessitated by any action of the bowels are attended with considerable pain in severe cases.

On the other hand, opium or morphia which may well be used hypodermically, is often of great service, alleviating the pain in the joints and allowing the patient to get some sleep. When cardiac mischief arises in a case of acute rheumatism, it should be treated in accordance with the plan adopted in such cases, the consideration of which is outside my subject.

I must, however, say something about the treatment of hyperpyrexia, a matter of much interest and importance. It is unfortunate that in this severe condition, where most we want its aid, the

salicylate of soda, though it was originally introduced as an antipyretic, should entirely fail.

Nor can I say much that is favorable of any other of the reputed febrifuges, such as quinine, antipyrin, etc. In truth, we are driven, in the treatment of hyperpyrexia, to the application of external cold, and although some years ago I expressed a very doubtful opinion as to the efficacy of this method, a further knowledge of the subject has led to a considerable modification of my original views. There is now, I think, no question that the careful and judicious use of the cold bath or cold pack holds out the best chance of saving life in these truly formidable cases. The most important precaution would seem to be that the application of cold should be gradually and cautiously applied so as to avoid shock. This may be accomplished by placing the patient at first in a bath the temperature of which is not much below 80° F., and gradually reducing the temperature until the desired effect is produced. This bath may have to be repeated more than once, perhaps, and the use at the same time of injections of ice cold water into the rectum may be of service.

Where a bath is not available or thought to be undesirable for any reason, the cold pack may be tried. In cases where ice is not used, the patient's body and limbs are wrapped closely in a single sheet, which has been previously wrung out of cold water (temperature 50 to 60°). A blanket is then thrown loosely around him, and he is allowed to remain undisturbed about half an hour, when the same process is gone through again, and repeated until the temperature is sufficiently reduced. When the ice pack is employed, a hip bath, or other suitable receptacle containing a few gallons of water, in which some large pieces of ice are floating, is kept by the patient's bedside, and his body and each limb are separately wrapped in pieces of old sheeting which have been

wrung out of the iced water, each piece being renewed as often as it begins to feel warm to the hand. No other covering of any kind is put over the patient.

In this way the temperature may be very rapidly reduced, and it is necessary to be careful that it is not brought too low. It should not fall below 99° F.
—*Med. Digest.*

CARBOLIC ACID FOR ERYSIPelas IN CHILDREN.—In one of the papers on the "Therapeutics of Infancy and Childhood" which Jacobi is contributing to the *Archives of Pediatrics*, he denounces painful and irritating measures, such as mercural ointment, collodion, or nitrate of silver applications, or incisions outside the borders of the inflammation. He recommends the use of carbolic acid, of which he says:

Hueter recommended many years ago the subcutaneous injection of a two per cent. solution of carbolic acid around the inflamed surface, and claimed to have confined every case within its original limits. In place of that, I advised, many years ago, the application not on, but around, the erysipelatous area, of a mixture of one part of carbolic acid in eight, ten or fifteen parts of oleic acid. I have treated many cases in that way, and most of them quite successfully. The application was to be rubbed into the surface around the diseased part at frequent intervals, or when the erysipelas was confined to the extremity, a band or compress soaked in the mixture was applied above or below the diseased part, not infrequently with the result of stopping the process. Instead of the carbolic acid as administered by Hueter, Ducrey uses a solution of one part of corrosive sublimate in one thousand of water, and repeats the injections, which are to be made three centimetres apart after twelve hours. A better plan, however, is, after all, to apply carbolic acid, one part dissolved in ten or fifteen of alcohol, directly to and beyond the sur-

face, every hour or every few hours. It is readily absorbed and may do good. It will do good in most cases, but may do harm by affecting the kidneys. Thus in every case where it is to be applied, the kidneys must be watched carefully, and particularly in young children. Carbolic acid being rapidly absorbed, will affect infants very severely.

The internal administration of the tincture of the chloride of iron has been considered a specific by many. That opinion is certainly based on an exaggeration of its merits. The preparation is, however, an antifermentative, and while being a vascular stimulant, does not give rise to fever in infectious diseases as it would do in simple inflammatory fevers.—*N. W. Lancet.*

ANTISEPTIC PASTILLES IN DIPHTHERIA.—Vaumond recommends the following as prophylactic in diphtheria, especially for children that cannot gargle, and in whom pharyngeal applications are difficult:

Boracic acid	20 parts
Benzoate of soda	1 part
Oil of thyme	½ to 1 part
Biborat of soda	20 parts
Citric acid	12½ parts
Oil of lemon	1½ parts
Oil of mint	1½ parts M.

Each pastille should weigh 30 grains,

and contain one-third grain of boric acid, and $\frac{1}{16}$ grain each of benzoate of soda and of oil of thyme. Glycerine, water, gum and sugar are used as a basis and solvent, and gelatine is used to give the mass consistence. — *Wiener Medical Presse.*

TREATMENT OF ECZEMA.—Kaposi recommends the following formula as an application for eczema:

Naphthol	5 parts
Black soap	50 parts
Powdered chalk	10 parts
Prepared lard	100 parts

The parasites are immediately destroyed by this ointment. Different forms of eruptions, especially scabby eczema, are rapidly cured. This ointment should be rubbed in twice daily. It is free from odor, and does not stain linen.—*Med. Jour. and Ex.*

THE TREATMENT OF BURNS BY COCAINE AND LANOLIN.—Dr. Wende recommends, in the *Journal de Medicine de Paris*, the use of an ointment of hydrochlorate of cocaine and lanolin as a dressing for burns. By this mixture not only is perfect occlusion obtained, but pain is almost immediately arrested. It is necessary, however, that the cocaine be pure, and that the ointment be recently made.—*Ther. Gazette.*

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ORIGINAL COMMUNICATIONS.

WATER AS A THERAPEUTICAL AGENT IN THE TREATMENT OF DISEASE.*

BY F. C. ROBINSON, M. D., WYANET, ILL.

This is an age of speculative uncertainty as to what constitutes the true science of life and the laws which govern our being, and for ages past it has been the grand aim of our profession to solve the problem of our existence, that life may be prolonged and mankind made better and happier by our efforts. Who can explain how the principle of life is united with animal and vegetable matter to produce living, organized beings which require fluids to maintain and perpetuate their existence?

Who can demonstrate the principles governing the great circulatory system of nature, and tell just how fluids serve the purpose of nutrition and growth, and why they must contain all of the vital properties necessary to support organic life or death ensues? Who can tell where death begins or life ends, or why blood, the life-giving principle of man, must be four-fifths water or disease follows? In fine, who can tell what man is—his origin, the purpose of his existence and his destiny?

The answers to these queries belong to the great unknown, or the indefinite future, and in the light of our present knowledge it is useless for us to the-

orize or speculate upon the hidden laws of our being, or attempt to harmonize or explain all the varied vicissitudes and changes through which we pass in life, or just how fluids chemically perform their part in the great laboratory of vegetable or animal life.

Without claiming anything original in this paper, or desiring to occupy much of your time, I will present to your notice some of the uses of water as an aid in the cure of disease, soliciting free discussion and criticism.

Within the last half century radical changes have been made in the use and application of water as a medicinal agent in the treatment of disease. At the present time there are few physicians who do not realize its beneficial effects in fevers, when taken freely as a drink, by hot baths or cold packs, especially in children. Many of us remember when water was not allowed the fever patient, except in very limited quantities, and nurses solemnly warned to withhold it, because of the belief then prevalent that it would delay the recovery or cause the death of the fever patient.

By the light of experience and chemical investigation this superstitious idea

*Read before the North Central (Ill.) Medical Association, at La Salle, Ill., December 4, 1888.

of the past has been dispelled, and to-day the progressive physician gives the fever sufferers all the cold water they desire, and often urge it upon them, well knowing that the rapid oxydation of the tissues in fevers causes effete products to be found in the blood, which must be removed or they will poison that fluid and render it unfit to fulfill its purpose in the human economy. Hutchinson, in his article upon typhoid fever in Pepper's "Practice of Medicine," says that the high temperature which is generally present in this fever, and the rapid combustion of tissue which it causes, make a full supply of liquid a necessity which is dangerous to disregard. Water is the best of all diuretics, and it is important in this disease, as in all others, that the functions of the kidneys should be kept active, so that the products of the combustion may be eliminated with their secretion.

It seems strange to us in this enlightened age that educated, intelligent men, as physicians ought to be, should have so long followed the false adage—feed a cold and starve a fever, and refuse water as well. There are crank doctors who have tried to find the limit of physical endurance. One Dr. Tanner started upon a forty-day fast without water, but in a short time was obliged to take it or he never could have finished his long fast—an experiment which has been of no benefit to science or the medical fraternity.

I have in mind a case which illustrates the "no water in fever" treatment, which was of frequent occurrence thirty or forty years ago, and there may be gentlemen here who still persist in refusing it in fever, and who still follow

the unscientific and barbarous customs of the days when emetics, calomel and jalap and a lancet were the entire armamentarium of the doctor's saddle-bags. A florid, strong and vigorous man in Fulton County was ill from an attack of bilious fever, and was treated by one of this class of physicians. He refused to allow this man cold water, except in very small quantities of an ounce or less at a time, when the gentleman, as he afterwards described it, was suffering the tortures of the damned from thirst. A week of burning fever, pain and thirst had passed, and still he was no better. The doctor told his family of his dangerous condition, and still insisted that a drink of cold water would hasten his death. When not delirious, he was begging for it continuously. The following night, while his attendants were out of the room, he left his bed, and from a wash-pitcher on the stand drank more than two quarts of rain water, determined that if this was to be his last drink of water it should be a good one, and he would die satisfied. He returned to bed and immediately fell asleep. The doctor at his next visit found him better, and after assuring him of a speedy recovery, said he was satisfied that if he had given him all the cold water he desired he would certainly have died. When fully recovered he told the doctor how he secured this drink, and as he was not a very religious man, used adjectives uncomplimentary to a doctor who would advise or allow such a pernicious and cruel treatment.

I have thought that such physicians, in reasoning from cause to effect, compare high temperature in man to an

over-heated boiler, when, if cold water was turned in, it would rapidly generate too much steam, and their patients, not able to stand the pressure, would explode, burst their boilers and die.

My experience in the use of water in almost every disease occurring in this climate has long since satisfied me that it is less objectionable and produces quicker and better results than any other treatment, and can be used when all other medication is contra-indicated. Drinking water should be pure, uncontaminated by animal or vegetable impurities, and given ad libitum, unless, in rare instances, it should cause vomiting or interfere with the capability of digesting food. If children are comatose or delirious, as they frequently are in typhoid fever, give water to them regularly, or force it upon them, if they refuse to take it, as I was obliged to do with a child of six years just recovering from that fever.

The great success attained by hydro-pathic treatment at celebrated springs has caused an exodus of invalids who had sought relief in vain from regular practitioners or the illusory promises of homeopaths or itinerant quacks.

Chronic rheumatism or neuralgic diseases are often cured by this treatment, and I know of no reason why we could not be equally successful if we adopt and persistently follow the course pursued at these springs, and thereby relieve many of these invalids, with profit to ourselves and save them the large expense incurred in such treatment.

Obstinate constipation can be relieved by drinking half a pint of cold water

half an hour before breakfast. Injections of warm water to relieve the lower bowels are superior to any pills, drugs or physic a doctor can give, and it does not interfere with or derange the organs of digestion.

It is my custom to allow cold drinks of water in all cases of measles whenever patients desire it, and I am satisfied that it aids the early appearance of the rash, and certainly is cooling and grateful to the patient. Hot drinks or vile and nauseous teas are unnecessary in this disease, and should be discarded as useless, odious and disgusting. If congestion of the lungs or any intercurrent inflammation occurs, or the rash much delayed, a hot-water bath or the old reliable corn sweat will break up the complication with amazing rapidity, and if the head is kept cool, will not generally be unacceptable to the patient.

Hot baths reduce temperature by causing free perspiration afterward, and cold packs reduce it by cooling the surface sufficiently long to reduce the heat of the blood, and, if used judiciously, seldom fails of success. I have reduced the temperature four degrees in two hours by wrapping around a child a sheet wet with tepid water, and no other covering. Cold packs are sometimes objectionable because of their depressing effects, and should only be used to reduce high temperature and when there is no congestion or inflammation of any of the vital organs of the body.

Cold water poured in a small stream from a pitcher upon the head for five or ten minutes will often relieve headache, and is a benefit in all inflamma-

tory brain diseases, if, at the same time, you can put the feet into hot water containing mustard or pepper.

Large enemas of warm water will cure spasmodic colic, and I have, in one instance, relieved strangulated hernia by the same method, and at another time the same result was accomplished by a large injection of warm linseed oil. I have often applied a cloth wet with cold water upon the throats of children suffering with spasmodic croup, with satisfactory results.

I have seen infants suffering with diarrhoea or summer complaint, sleepless, worrying, fretting or crying from thirst, begging for water, and the mother or nurse afraid to give it more than a teaspoonful or two at a time, saying that it vomited everything it drank as soon as taken. I have often, when visiting such cases, called for a glass of cold water, and, to the surprise of the mother, would allow it to take all it could drink, which usually would be retained, and the child would soon be wrapped in refreshing sleep. Without medicine, a proper regulation of the child's diet would soon restore it to health again.

The spasms of children, from whatever causes, or the eclampsia from uremic poisoning, are often readily controlled when immersed in hot water or given a hot vapor bath or corn-sweat. If the convulsions of children are accompanied by a high temperature, put them into water of 100° and then gradually cool it down to 68° or 70° , and then keep them in a room of the same temperature, with little covering. If the temperature rises, repeat the treatment as frequently as neces-

sary, and I think you will not be disappointed in the results.

Scarlet fever and diphtheria, two of the most dreaded and formidable diseases of children, are largely shorn of their terrors when, in addition to an early and thorough medicinal treatment, the little patients are bathed in as warm water as the surface will allow frequently, or for thirty minutes wrapped in a warm, wet blanket, followed by warm, dry coverings, to maintain the perspiration which such treatment usually produces. It has proven to me a valuable aid in eliminating from the blood the specific poison which causes these diseases, and I can safely recommend it to your notice and trial.

There is no disease more favorably influenced by this treatment than pneumonia, and in mild cases one daily warm bath or sweat, without medicine, will be sufficient to arrest this disease, and it is among the first things I usually order. If I find a child or infant with a temperature of 103° to 105° , short, dry and painful cough, dyspnoea, rapid pulse, great thirst, or vomiting, with dry crepitation in any part of the lung tissue, I order it rolled up in a blanket or sheet coming out of hot water, and in thirty minutes change it to warm, dry blankets, and soon the little, fretful, worrying sufferer would rest in a quiet, peaceful sleep.

In this paper I have not referred to the therapeutical use of medicine as an adjunct to this plan of treatment; neither do I desire you to infer that I consider it a specific in all cases, or soak all of my patients in hot water or cool them off in an ice-box. I have gained my point if I impress upon

your minds the fact, that when used properly, its effects are of inestimable value, realized by no other remedy. I will not trespass upon your time and patience further, but close this hastily prepared paper with the statement of a case which, if not a deception, is somewhat peculiar and unique, yet demonstrates the nutritive value of buttermilk to sustain life indefinitely, without any other food or drink whatever. In all ages of the past the great desideratum of mankind has been to know what they shall eat and what they shall drink and how they may be obtained. When these queries are put to us, as they often are, we make a sad mistake when we advise beer, whisky, gin or brandy, when milk, buttermilk and other liquids containing the elements necessary for nutrition are all that is necessary. In March, 1887, a man came to Wyanet upon a reclining roller chair and engaged board in a private family. He said he had been injured in a mill in Ohio, and for twelve years had been obliged to lie upon this roller chair or bed, as it was generally, in a reclining position. The only drink or food he was known to have taken while here was buttermilk, of which he would drink half a gallon to a gallon per day. He seemed to avoid physicians, and gave strict orders to the lady of the house that under no circumstances should they call one for him, or give him any medicine prescribed by one, if

unconscious or delirious. At one time for seventeen days he did not take buttermilk, and at another for forty-three days he is said to have taken neither buttermilk nor drink of any kind. He used every means in his power to gain the sympathy of the people by relating the story of his pitiful condition, and at one time asked me what I thought of his power to live without food or drink. I pointed to the dried grass in the yard, and said a man may live for a time without food, but all animal and vegetable life must have water, and without it they dry up and perish. The surface was cool, moist and natural, and I asked him where this moisture came from. He was offended because I doubted his honesty, and I was not invited to call again. For six months he was never known to take a drink of water, nor any other nourishment than buttermilk. I speak of this case because some of you gentlemen may have met him and have had an opportunity to verify the pretension that a man can live more than forty days without food or drink, as he claimed to have done.

Last week I visited the family where this man boarded, and learned that it was his custom to have a pitcher of boiling water and one of rain water brought to his room to use for his morning bath, and with doors locked, may have used it otherwise than by bathing.

DR. NICOLAI employs in the night sweats of phthisis an embrocation of 2 drachms of chloral hydrate dissolved

in a tumblerful of brandy and water, the patient being rubbed all over, for a few nights successively, with a sponge dipped in this solution.

STRICTURE OF THE CÆSOPHAGUS.—RECOVERY.*

BY FRANCIS DRUDE, M. D., QUINCY, ILL.

Mr. President and Gentlemen :

Again I am called upon to address you and to read an essay. A clinical case might be the only subject on which I may make an attempt, and I will offer you a case, so seldom occurring, so distressing, and yet so interesting from a scientific standpoint, that it may serve to study the causal connection of symptoms presenting.

In giving my own individual case, I may be pardoned for it, as it might appear selfish and egotistical; but the proverb reads, "From the abundance of the heart the mouth speaketh." My sickness, lasting fully five months, occupied my thoughts night and day, and when I, ten months ago, related my symptoms to our society, seeking advice, I am proud to say that I met with the profoundest sympathy from every one of my old and young friends and colleagues, for which I even now tender you my sincerest thanks.

When a man feels that he is getting weaker every day, that his weight is decreasing in such a degree as to the amount of loss of thirty-six pounds within a few months, is it a wonder, then, if he feels despondent, hopeless and despairing? If he walks on the street "with fainting steps and slow," every acquaintance is but too apt to address him and tell him how slim and bad he looks, that his time is up and his days numbered. Such expressions, may he be ever so callous, will leave an unpleasant feeling behind about the regardlessness, the want of every feel-

ing and sympathy of his fellow-men, that his despondency is increased, that he feels his doom all the more certain. Yes, my friends, all these feelings have I experienced during this long time of sickness, and I will now attempt to describe the symptoms; but owing to my desperate and hopeless condition, I made no memoranda, but rely only and entirely on my memory, which, fortunately, has been tolerably preserved. I now will give you a graphic description of the typical syptoms of my ailment.

At first I experienced an almost impossibility of swallowing anything substantial, even a crumb of bread. At dinner, when I attempted to swallow rice soup, a grain of soft rice produced singultus (hiccough), which would bring on regurgitation, not ceasing until everything in the cœsophagus, and even of the contents of the stomach, was ejected. There was a peculiar feeling of oppression existing, brought on, as I theorized, by the formation of pockets, filled with the swallowed ingredients, above the stricture, which acted as a pressing element on the diaphragm and neures vagus. At times I could swallow water quite freely; at other times not a drop would go down. This at once settled the diagnosis. My case was a spasmodic stricture of the cœsophagus, the seat of which was near or at the very cardia. Whenever these vomiting attacks would set in I had to spit out enormous quantities of an albumen, like white phlegm, entirely taste

* Read before the Adams County (Ill.) Medical Society, March 11, :889.

less and colorless, and when rid of this I would have rest until another attempt of swallowing would be made. The tongue during the whole time was deeply furred, coated with a thick yellow-white covering, while the taste was anything but pleasant. Characteristic was it that I enjoyed good rest during the night. The stool was very tardy; the urine made a thick, turbid settlement, reacting mostly acid. While being used to take a glass of beer occasionally, I had a decided aversion to any and every alcoholic stimulant.

In treating myself I had almost exhausted the whole stock of the "materia medica," and having but little confidence in any treatment, I sought advice, and consulted an old, experienced brother physician, who, after the examination, concluded that nervous prostration was at the bottom of the mischief. He advised me to take strychnia, commencing with one-twentieth of a grain, three times daily, and increase slowly until I would experience some typical effect. This plan I followed faithfully for nearly a month, but without any beneficial result. In the second month of my disease I became so weak and exhausted that I did not feel like going out, and requested a brother physician to see me in my house. Judging from the thickly loaded tongue and the foul breath, he advised to take ten grains of calomel, to be followed by calcin. magnesia. All these acted rather slowly on the bowels, and instead of improving the tongue, the whole system showed a more fetid character. Then I was advised to use small, homœopathic doses of calomel, one-twentieth of a grain, every two hours. This pro-

cedure made the condition from bad to worse, so that I almost despaired, loosing all confidence in our remedies. At this time (it was about the first of June) I resolved to try the Siloam Springs, thirteen miles beyond Clayton. Here I stayed for a week, drank the celebrated (?) magnesia water every day in quantities as much as the stomach would receive, but, I am sorry to say, without any benefit. Any attempt to eat would bring on singultus, so that hungry as I was and feeling very empty, I was compelled to leave the table during my stay at the hotel. Not one meal could I eat without experiencing the distressing hiccough and then vomiting. Mrs. Dr. Wilson, the proprietor of the hotel at Siloam, an eclectic graduate, acted very kindly to me, giving me every imaginable comfort. She advised a vapor bath, because I always felt as if a chill was within me; and I must confess that this, followed by a warm bath, with the administration of the flesh-brush, gave me great relief. The season, though, was most unfavorable. A good, warm stove had to be kept in the parlor morning and night, even in the month of June, so that after a week's stay I concluded to return home, rather than to die there in the wilderness, away from home. Siloam Springs is a very nice and comfortable place—a valley of moderate size, surrounded by pretty and elevated hills, even at the height of a hundred feet. In the basin there is a variety of springs, containing sulphur, iron and magnesia, which together form quite a stream of water. The hotel is comfortable, cheap, and a good table is set for the most fastidious, for

those who are well enough to enjoy it—but, alas! I compared myself with poor Tantalus, who, because he divulged the secrets of the gods on Mount Olympias, had to suffer unsatiable thirst standing up to the knees in water, which would vanish whenever he made an attempt to drink, and having over him the finest fruits, which would remove when he reached for them.

Having returned home, I again related my case to the Adams County Medical Society, stating that I thought if relieved from this most distressing singultus, I would not mind the whole disease. One of the older, more experienced brothers suggested that I might try for once atropia sulph. Like a drowning man, who will take hold of a straw, I had the article carefully prepared for me, of which I took three times daily $\frac{1}{20}$ grain pro dosi. Not the least effect did I experience from this dose the first day, and feeling desperate, the next day took one-sixtieth grain, the double dose; but from this, within about half an hour, I felt the full effect. While I was reading, at once I could not see any more, everything turning dark before my eyes, owing to dilated pupils, while at the same time a dryness in my fauces and an unquenchable thirst took hold of me. These symptoms disappeared within about two hours, and I had the sweet gratification that I felt as if the inward spasm had left me. Never since have I experienced so bad a hiccough, although I stopped taking atropia, being frightened by this effect. Sometimes slight attacks were felt, but I did not mind them, while before the spasms

would last from ten minutes to three hours, to utterly exhaust me.

I must mention here that in the beginning of the disease I had made use of quinine to the full extent, even to well established quiniism; and I also must not forget to say that the only relief I have always felt during the worst stages was from smoking tobacco, either with a pipe or cigars, the tobacco affording me more relief than any opiates, which seemed to have no effect on me. I could smoke from early morning till I retired without experiencing any bad effect whatever.

An old friend advised me to write to Prof. Dr. Henry B. Sands, in New York City, the so celebrated surgeon, who had been connected with and consulted in the cases of Generals Garfield and Grant, and last year operated on Dr. Agnew for typhlitis. All these cases turned out unfavorably, as, of course, they would under any treatment, yet Dr. Sands' reputation did not suffer by them. I gave a minute description of my case, telling him if he thought it necessary for me to see him personally I would do so. In a postscript I said that I had a strong suspicion that my sickness might be a vicarious ailment of slumbering haemorrhoids, which had showed up about twenty-five years ago in the shape of a big lump, quite inflamed and very painful, outside of the sphincter ani, on which I had four leeches applied, producing a collapse of the swelling and an after-bleeding lasting about a week. Since that time every symptom of haemorrhoids had disappeared. Dr. Sands, in reply, counter-advised my going to

New York, and thought it best to leave my case to nature, while he hinted that cancer would set in sooner or later and finish me. As may be imagined, this answer disappointed me very much, and in order to get more satisfaction to myself and family, I resolved on going to St. Louis to consult the best talent there. I picked out Dr. Bernays, sen., who received me very kindly and examined me with great care. He fully concurred with my diagnosis, and advised to use peptogenic milk-powder, prepared by Fairchild & Foster, which preparation I would be able to swallow with ease, and which might strengthen and enable me, in course of time, to swallow and bear more substantial food. Weak as the hope was, his kind advice elevated my spirits somewhat. I returned home, took this baby medicine for a half month, and I can say that it acted on my sore oesophagus as a soothing syrup.

At length I got tired of it, and after taking a dose of quinine with ext. aloes, in the evening, I felt quite desperate the next morning, and resolved taking two small glasses of St. Louis Anheuser beer within about an hour. For five months I had abstained from it and now I had to force it down, waiting for the result. About two hours later I experienced very painful gripings, compelling me to rest. Very warm applications of dry salt-bags were made on the abdomen, giving some relief. Then frequent discharges of the bowels set in, lasting fully twenty-four hours, at the rate of one every hour. The stools were not thin, watery, but of a peculiar, almost typhoid character. The revolution in my whole system proved to be

quite *critical*, the effect more intense than from a dose of calomel and jalap. Under a diet of thin gruel or cracker soup, the diarrhoea kept on for nearly a week, and since the contents of the stool were still odorous, I made no attempt to stop them, however weak I was.

About this time I was in the night waked up by a most singular feeling, as if a foreign body was within the rectum, which, on examination with my finger, proved true. There was a lump of the size of a thumb within the rectum, hanging down like a polypus and keeping the rectum half open. The tenesmus produced by it was painful, but the assurance that my theory of the nature of the stricture being a vicarious, a metastatical disease of the slumbering haemorrhoids was correct, made me forget all my pains, and gave me hopes of an ultimate and sure recovery.

From this time on I could begin to eat more substantial victuals, regaining slowly the lost flesh and strength. Now, a full year since the commencement of the ailment has passed, and I can say, "Richard is himself again." I am sixty-nine years of age, but do not feel my age as much as many a person of fifty years.

I must not forget to mention a very strange coincidence. Dr. Sands and Bernays, whom I consulted and who both gave me up, have died since,—the one from apoplexy of the heart, the latter from blood-poisoning while treating a patient with erysipelas,—while I enjoy life in ripe old age and stand many hardships as well as many young people.

After this haemorrhoidal *crisis* I began to swallow well, even more sub-

stantial victuals, such as meat, cooked fruit, while anything of a tart (astringent) nature created a feeling of contraction in the act of deglutition; particularly green peaches or apples would not go down, while, when cooked well, they agreed and created no trouble.

During the month of August I resolved on taking a trip on the boat to St. Paul. The river air and the gentle, passive motion and exercise had always exerted the most beneficial influence on my health. Even this time, weak as I was, the trip gave me an appetite that I could scarcely wait for the meals. The weather, however, was very unfavorable to every one seeking recreation from an atmosphere warm and pleasant. A big fire had to be kept up, even in the midst of August, morning and night in the main cabin, so that the beauties of the scenery and the fresh breezes were of little benefit to the passengers. Arriving at St. Paul, the first thing I noticed at the Windsor Hotel was a big fire kept up and all the passengers around the fire-place. This, I thought, was no climate for an invalid, and so I returned the same day on the same boat.

The medicines I took *after the crisis* consisted mainly of preparations of aloe, for two reasons—first, I wanted to keep up a certain operation of the bowels; and second, I was taught that aloe exerts an influence on haemorrhoids in restoring and regulating them. The preparation I have been using up to present day consists of aloin gr. $\frac{1}{4}$, strychnia gr. $\frac{1}{10}$, ext. bellad. gr. $\frac{1}{2}$, and ipecac gr. $\frac{1}{6}$. Of these pills I have taken one or two every day, and found that they answered their purpose en-

tirely. Often at night, whenever I had taken a hearty supper, I have felt colic pains and a sense of fullness and flatulence in my stomach, producing insomnia, for which I took a dose of fifteen to twenty drops of spirits turpentine in about one tablespoonful of spirits frumenti, and in a few minutes I would drop asleep, it acting as a good hypnotic on me. During the worst stages of my sickness I had also recourse to asafoetida, the tincture of which I took in teaspoon doses in a wineglass of water, and for a few days it afforded me some relief, rendering proof that the cause of my whole ailment consisted in a spasm.

Before I bring this, my own case, to a close, I may be permitted to make some *reflections* relative to the cause and treatment of the case. The *indicationis ex juvantibus et nocentibus*,—that is to say, which remedies proved beneficial and which exerted a bad, undecided result; which treatment might properly have been adopted, had the cause and origin been fully understood—such reflections might not be entirely out of place. It was only after I had become a mere skeleton that I had a strong suspicion that the long-slumbering haemorrhoids were the cause of my sufferings. If I could, with any certainty, have known what was proved by time, I believe the treatment exclusively with aloetic remedies, inwardly and per annum, systematically carried out, would have been the most proper one—because radical. There is one remedy besides which I have used with good result to strengthen the weak “succus gastricus.” That is *fel tauri (Covis) inspissatum*, a remedy

which was extensively used for dyspepsia fifty years ago, particularly in Germany. Only of late years have I seen it mentioned by respectable physicians here in our country and the most favorable results recorded. But there is some difficulty in obtaining a good, genuine article. We have to prepare it ourselves. You take the gall from fresh-killed beef, and under gentle fire, or rather in a bath (like glue is prepared), let the watery parts slowly evaporate until the consistence of a thick extract is gained, when it is to be formed in pills, before it gets too hard. Truthfully can I recommend this remedy for dyspepsia. Doses of ten to twenty grains daily will give great relief.

I must not forget to mention that in a practice of forty-six years I have met only three cases of stricture of the esophagus—two in Germany, produced by the swallowing of oil of vitriol (oxide sulphuric acid). They both resulted in organic strictures. A post mortem examination in both cases showed several of these in the canal, forming a callous ring at several places, entirely obstructing the passage. It could be

noticed on these poor victims that a few drops might pass the upper stricture, arrive at the second, stay there, and create a sensation of suffocation. Both died of starvation. They were nourished awhile by beef tea with eggs per anum, but finally nature would not receive these injections more, the sphincter ani having lost the contractions. The third instance I have met with was here in Quincy, about twenty-five years ago. It was brought on by drinking excessive quantities of ice water in the heat of the summer to cool the poor laborer and allay his thirst. After a continuance of a couple of months, he all at once suffered intense pains. Whenever he attempted to swallow anything it produced a feeling of suffocation. He also died six months after the first attack.

There now remains only to say a few words about the true diagnosis. Was my case cancer or not? This question must be answered positively and emphatically. It was not; for the characteristic lancinating pains were never experienced, and then I have so far recovered and regained my old weight, in spite of advanced age.

SELECTED ARTICLES.

CREASOTE IN THE TREATMENT OF PHTHISIS PULMONALIS.

BY AUSTIN FLINT, M. D., LL. D.

In the summer of 1888 on entering upon my service in the Bellevue Hospital, I noticed a number of patients in the wards of the third division wearing what are known as "perforated-zinc inhalers." For several weeks these patients had been treated with inhalations of creasote by a method suggested

by Dr. Beverly Robinson to Dr. Maury, the house physician, before Dr. Maury entered the hospital. The improvement noted in these cases was so considerable that I directed the treatment to be employed in all the cases of phthisis pulmonalis in the male wards, with the exception of a few cases of the

last stages of the disease. A considerable number of cases did not remain under observation as long as two weeks. These cases are not reported. In the ten cases reported from the records kept by Dr. Maury the treatment was followed for two or more weeks. In addition to the inhalations in all the cases reported, creasote was also administered by the stomach, and in some cases other remedies were employed.

The perforated-zinc inhalers consist simply of a sheet of perforated zinc or tin, bent into a pyramidal shape and large enough to cover conveniently the nose and mouth. At the apex of the pyramid a bit of sponge is firmly held by means of strings in two bends in the margin of the zinc plate. Between the sponge and the mouth and nose there is a vacant space, which obviates the stifling feeling which is so objectionable in the use of inhalers that are applied closely over the face. The inhaler is held in place by two narrow elastic bands, which pass around the ears. Before beginning an inhalation, the sponge should be properly moistened with water or alcohol and the inhaling fluid poured upon it.

In the cases reported, the fluid used consisted of equal parts of creasote, alcohol and spirits of chloroform. Of this mixture ten to fifteen drops were put upon the sponge. The treatment was begun with an inhalation of fifteen minutes' duration three or four times daily, increased until, in some cases, the inhalers were worn almost constantly, except at night. There was no irritation produced by the inhalation, all the patients saying that after a few trials it relieved the cough and the irritability of the throat. In some cases in which the sweating at night was very profuse, atropine, $\frac{1}{16}$ of a grain, with fifteen drops of aromatic sulphuric acid, were given at bedtime. In a number of cases in which the appetite was very poor, a tonic, usually a mixture of iron, quinine

and strychnine, was administered before meals. In some cases in which the cough was very severe a palliative cough mixture of spirit of chloroform, hydrocyanic acid and syrup of wild cherry was used. No other medication was employed.

The records of the ten cases reported show that creasote by the stomach and the inhalations, in cases of solidification without cavities, effect prompt and decided improvement in all phthisical symptoms, with increase in appetite, weight and strength, even with surroundings much less favorable than would obtain in many cases in private practice.

In cases with small cavities much less improvement is to be looked for, but some benefit may be expected.

In cases with large cavities the treatment seems to have but little more than a palliative influence.

The observations here recorded are defective as regards the influence of the treatment upon the bacilli. In one case, with large cavities, it was noted that the number of bacilli was diminished. No other examinations for bacilli were made during or after treatment.

No estimate was made of the relative value of creasote taken into the stomach. As regards the inhalations, it is assumed that the chief benefit was derived from the creasote, the spirit of chloroform and the alcohol rendering this agent more volatile, and soothing the mucous surfaces. The inhaled vapor undoubtedly penetrated by diffusion as far as the air cells. It is by diffusion that fresh air, anæsthetic vapors, etc., penetrate the lungs, and cases of pneumonokoniosis illustrate the fact that even solid particles may be carried to the pulmonary vesicles.

I have employed the method of inhalation here described, conjoined with other treatment, in private practice, with good results. In a case of irrita-

tive cough of several months' standing, with slight bronchitis and emphysema, but no signs of phthisis, which resisted

ordinary treatment, three inhalations produced complete relief, and the cough had not reappeared at the end of four weeks.—*Col. and Clin. Record.*

COMMON MEMBRANOUS SORE THROAT.

BY J. SOLIS-COHEN, M. D., PHILADELPHIA.

Described by authors under the following heads: Non-malignant membranous sore throat, diphtheritic sore throat, herpetic sore throat, aphthous sore throat, croupous angina, common membranous angina, herpes pharyngis, herpes gutturalis, angina membranacea, *seu* herpetiformis, *seu* aphthosa. A rather frequent form of sore throat, often confounded with diphtheria, occurring at all seasons, characterized by the exudation of products eventually fibrinous which coagulate upon the surface of the mucous membrane into a pellicle or pseudo membrane.

The characteristic features are preceded for two or three days by those of ordinary sore throat. In most instances these symptoms supervene upon chill, with febrile reaction and subsequent manifestations of general systemic disturbance, such as headache, nausea and intense fever, the temperature rising to 103° to 105° . Then the pain increases, deglutition becomes painful for a few days, and the conditions to be described presently are observed. Recovery is usually spontaneous within ten days or less. In some subjects recurrences take place at short intervals for weeks or months, or even during years.

The disease is usually unilateral, and the corresponding submaxillary and cervical lymphatic glands sometimes become moderately swollen. It is maintained by some observers of unquestionable authority that within a few hours of invasion the initial feature of the local expression of this disease may always be detected on the palate and

uvula, sometimes on the tonsils, less frequently on the pharynx and occasionally on the hard palate. Small vesicles of the size of a millet-seed or somewhat larger are seen either isolated or in groups, with contents more or less turbid and surrounded by more or less vivid zones of inflammation. Actual tumefaction has been described ("Potaïn, Gaz. des hôp.", 1879, No. 11). Occasionally the vesicles disappear without traces after a day or two, and then there will be no membranous exudation. Some authors (Bosworth and others) restrict the term herpetic sore throat to these rare instances. So rarely is a case seen sufficiently early to detect the vesicular stage that this initial feature has been denied (Vogel). I have seen it in a very few instances. Most frequently the vesicles undergo rupture in from twenty-four to thirty-six hours, and the ruptured tissues present as small irregular excoriations, which become covered almost immediately with a grayish-white plastic exudation. This exudation extends and becomes coalesced into contiguous patches, which have commenced in the same manner. Ulcerated mucous surfaces in other parts of the body often become covered with the same sort of deposit during the attack, and even cutaneous surfaces likewise, but to a less extent. In some instances the vesiculation is limited to the uvula, sometimes to its posterior and inferior surfaces; and then sometimes the false membrane does not form upon the surface of the excoriations, but the mucous

membrane becomes simply swollen and pasty looking. In some instances, and chiefly in children, the false membrane extends into the larynx. In some cases there is also herpes at the corner of the mouth, or on the inner surface of the lips or cheek, or on the tongue. In most instances the tonsils become slightly swollen, and then covered with a whitish or yellowish-white exudation, but slightly adherent. Sometimes there are accumulations of viscid,ropy and turbid mucous. The soft palate, and often its anterior fold, especially that portion in front of the swollen tonsil, acquires a fissured or corrugated aspect in many instances, and the membranous coating is distributed upon it more or less irregularly. If this be removed comparatively early, the surface is often found eroded and sometimes slightly haemorrhagic. When removed at a later date, the mucous membrane appears normal, the erosions having healed up meanwhile.

The affection has been regarded as a herpes zoster of the trifacial nerve, the result of irritation of the sphenopalatine ganglion (Herzog, "Pesther. med.-chir. Presse," 1880, No. 19; "Jahrb. fur Kind," 1880, December 23).

A membranous sore throat precedes some cases of enteric fever, and attends the advanced stages of some cases of phthisis and syphilis, due to the lowered vitality, which prevents reproduction of healthy epithelium. That form of sore throat is not the variety under discussion.

Exposure to emanations from the products of inefficient house drainage, ill-ventilated water-closets, or other accumulations, is often the apparent predisposing cause. The most frequent immediate cause of the attack is exposure to cold while the body is overheated or its cutaneous surface is in a state of active perspiration. Some patients are attacked almost annually, some oftener than once in a season.

The disease is often contracted by susceptible subjects during the prevalence of diphtheria, and then it may become a starting point for that disease. Under similar conditions it is sometimes endemic. Females are attacked more frequently than males, and young males more frequently than mature males. In some instances several females in a family or in a household will be attacked while all the males escape, probably because their vocations take them away from the continuous influence of the contagium in-doors.

The general subjective symptoms are those of acute sore throat, with marked febrile disturbances, usually sthenic in type. The parts affected feel dry and hot, these sensations in many instances extending toward the ear; in some into the posterior nasal passages; in a few into the larynx. Deglutition is often difficult and painful. When the larynx is involved, there will be superadded hoarseness, dyspnæa and cough.

Great difficulty is often experienced in diagnosis, especially because the disease is rarely caught sight of during the vesicular stage. Sometimes one or more of the excoriations left by the rupture of the vesicles can be detected. Sometimes small isolated islets of pseudo-membrane indicate recent formation by their transparency and their origin from a vesicle by their shape (Peter). The co-existence of cutaneous herpes is a corroborative indication, but it is by no means an infallible guide. In many instances differentiation from diphtheria is impossible, the more so that diphtheria is sometimes precipitated by a membranous sore throat. On the whole, the elevated temperature— 103° to 105° F.—so out of proportion to the mildness of the symptoms, and the absence of any history of possible exposure to infection from diphtheria, especially when the patient is a female, may be regarded as important factors of diagnosis in doubtful cases. The distinction from mycotic sore throat is

easy, because the latter is apyretic and intermittently continuous, and presents evidences of the *Leptothrix buccalis* under microscopic inspection of the pseudo-membranous product.

The tendency of the disease is to recovery, except in some rare instances in which the larynx becomes involved and life gets into jeopardy from mechanical obstruction to respiration. In the majority of instances recovery is spontaneous in from seven to ten days. Occasionally, and especially in children, death ensues from apnoea from the results of extension of false membrane into the larynx. Recurrences are not infrequent. In some individuals they are so frequent as to constitute a chronic membranous sore throat. One of my patients had recurrences during a period of fifteen years. In these instances there is usually some local cause for recurrences at work in the patient's dwelling. In my own practice several patients whose attacks were at least annual, and some of which were still more frequent during a series of years, acquired thorough immunity from recurrence after yielding to my urgent advice to move into more salubrious quarters.

Under debilitated conditions of system, common membranous sore throat will not be unlikely to merge into phagedenic ulcerous sore throat.

Paralysis of the palate sometimes follows recovery from common membranous sore throat.

When the diagnosis of common membranous sore throat can be made out with certainty, there is nothing calling for special treatment, but the treatment pursued in ordinary sore throat may be generally followed with advantage. It is practically a self-limited disease, with a tendency to recovery. When foetor exists, as during the detachment of patches of exudation, antiseptic and detergent spray may be employed. Solutions of borax, boric acid, carbolic acid,

potassium permanganate, hydrogen peroxide, etc., are appropriate. Lemon-juice is often an agreeable and an efficient application. In those individuals, especially strumous and tuberculous subjects, in whom there is a constitutional proclivity to chronicity, or to the recurrence of the peculiar manifestations, more active measures will be required. Locally, frequent application of the dilute acids—say, every day or two—affords the most satisfactory results. Internally, iron and cinchona preparations should be administered. Opium in small doses is of special efficacy, not as a narcotic, but as a gentle stimulant or nervous tonic. *Nux vomica* and arsenic may be employed for similar purposes. The diet should be highly nutritious and easily assimilable. Unnecessary exposure should be avoided. Supporting measures generally, hygienic as well as medicinal, should be persisted in. When membranous sore throat exhibits a tendency to phagedæna, the treatment for gangrenous sore throat becomes indicated. Common membranous sore throat may invite an attack of diphtheria, or the diagnosis may be in doubt. In that case the prudent course is to treat the affection as diphtheria, but to avoid the recommendation for diphtheria of some indifferent remedy during the exhibition of which a case of membranous sore throat has ended in recovery. When extension to the larynx occurs and threatens suffocation, tracheotomy or intubation to avert death should be practiced, as in croup or diphtheria.

In cases of recurrent or chronic membranous sore throat the cause should be searched for in the dwelling of the patient or in his place of vocation. Should either of these be found unhealthy, nothing short of change to healthier surroundings will be likely to be of permanent service.—*N. Y. Med. Jour.*

ELECTRICITY IN THE REMOVAL OF SUPERFLUOUS HAIRS.

BY FREDERICK W. OLIVER, M. D., NEW YORK.

The excessive growth of hair on parts normally free from it often causes a great degree of disfigurement, particularly in women, and demands for its removal have called the attention of the profession to the ways and means at our command for its permanent eradication. Dr. George Fox, of New York City, I believe, was the first to call attention to electricity, and the favorable results which he obtained surpassed his most sanguine expectation. Others have tried, with more or less success, varying to such a degree that it is considered yet an open question. An experience extending over a year and a half, with some three hundred cases, has thoroughly converted me to its favor, and I believe I can unhesitatingly affirm that in electricity we have the only means of removing hirsuties permanently. Why some fail where others succeed I know not, without it is due to misunderstanding and a lack of knowledge, or want of skill. I think it is very often the latter; but in order to briefly point out the possible errors some may have unconsciously fallen into, I will outline my method by a series of questions, as follows, according to the light of experience and its results:

1. What form of electricity should be used?
2. What strength must be used?
3. How should it be applied?
4. How can I know the hair papilla is killed?
5. Is there much pain?
6. Do any disfigurements follow?

In answer to the first, I need hardly say that only the continuous galvanic current can be employed, of from eight to twelve cells strength. So much depends upon the condition of the battery, whether the fluid is fresh, etc., that no rules can be laid down. Owing often to individual idiosyncrasies, some pa-

tients will require more than others. The location and condition of the skin are factors always to be considered; for instance, the upper lip and over the bridge of the nose are much more sensitive than the chin and adjacent parts.

Care must be taken to attach the cord holding the operating needle to the negative pole, or you will find, to your chagrin and the evident disgust of your patient, that little reddish-brown marks follow every puncture of the needle; this oxidation follows whenever the positive pole is used, and should always be borne in mind. Having arranged all the details properly, with the sponge electrode of the positive pole in the palm of the patient's hand, grasp the hair to be extracted by a delicate pair of forceps held in the left hand, while you introduce the needle along the shaft and into the follicle of the hair root. Always introduce the needle before completing the circuit, or the momentary shock of pain will be aggravated; and right here I might add, *never remove the needle until the current has been broken*, or you will needlessly cause severe pain in the operation. There is a needle holder that can be obtained at most electricians that I have used constantly, that enables the operator to connect or break the current at will by slight pressure of the index finger. In my opinion, this is far superior to making or breaking the current by removing the sponge electrode.

Very little or no pain follows the first tingling sensation, and I have had very few ladies complain of it, yet it is well to be guarded and begin with a light current, and gradually increase it as you find your patient can bear it. Ladies, I find, soon grow accustomed to it, and after two or three sittings will stand with impunity double the strength they could at first. The first

indication that the current is doing its work you will observe by the little collection about the needle of the disintegrating follicle, which, when complete, will enable you to remove the hair without effort. Always enter the needle parallel to the shaft, otherwise it will merely cross the papillæ, cutting it off, but not destroying it, and in the course of two or three weeks the hair will again appear, to your disgust. I believe it is almost impossible in a great number of instances to follow the directions of the papillæ under the skin, and often, when much deviation exists, striking them is more often a matter of chance than of experience.

The best guides in determining whether the papillæ has been destroyed is the ease with which the needle enters the little bubbling exudations about the needle, and the ease with which the hair comes out. In this way it is possible to remove about forty to sixty hairs during an hour's sitting. Faster work may be done, but I doubt its being permanent.

In reference to any disfigurement following the application, I do not believe

such a sequelæ possible, except where a current is unnecessarily strong and a patient's skin is in a very irritable state. Still, it is best to constantly *feel your way*, and in case there appears any tendency to irritability or inflammatory action prescribe a little soothing ointment of zinc ox. or vaseline. Where this precaution is used no appreciable result will follow which will not disappear itself in the course of a week or two.

In concluding this subject, I must say after using all the care possible, experience has taught me that only about 50-60 per cent of the hairs removed are permanently destroyed, the others requiring the second or possibly the third operation before they succumb. As to the permanency, I have only to recall the results of nearly three hundred cases operated on during the past year and a half to justify me in saying that in the great majority of cases *in the electric needle* we have the only thorough and permanent means of removing disfiguring and superfluous hairs.—*Med. Register.*

SCARLETINA AND ITS SEQUELÆ.

BY J. G. MEACHEM, M. D., RACINE, WIS.

The very great frequency and fatality of scarlet fever render it one of the most important diseases which come under the observation of the medical practitioner. Diphtheria and enteric fever alone, perhaps, destroy as many lives, and have as great a claim upon medical study. Scarlet fever has long been to me a dreaded disease. When about twelve years of age I contracted the disease by entering a front hall of a house in which was a child suffering from quite a severe attack of it. I was there but a moment, but the time proved sufficient, and in less than a week I was the subject of more than an ordinarily

severe attack. Two brothers, younger than myself, contracted it of me, and in less than forty-eight hours from the manifestation of the first well marked symptoms, they were both dead, so malignant was the disease. The epidemic, for such it proved, was of an unusually fatal character. It lasted but a short time, as it exhausted material upon which to do its deadly work. It was in Western New York, in 1836.

I can see no propriety in the usual arbitrary division of scarlet fever into three grades — that of Simplex, Anginose, and Malignant. It is of very little use in practice. It is scarlet fever, mild

or severe, as the case may be, and some do commence in the mildest possible form and end in the most malignant, thus embracing all three grades in its progress.

Frequently different grades of severity exist in the same family when passing through several members. I have seen cases occur so mild that one could scarcely be positive that the disease was scarlet fever, while death in two or three days has been the portion of some other member of the family. If there can be treachery in disease, scarlet fever stands pre-eminent for it. Every practitioner has had cases come under his observation that started off for the first day or two in the mildest possible manner, and his predictions could scarcely be any other than a gentle and safe course through, but suddenly an aggravation of symptoms appeared, and often of a severely malignant character, and after a few days of hard fighting for life succumbs, or, perchance, after two or three weeks, gets through, but terribly wrecked, with abscesses of the nuchal glands, otorrhœa, or sequelæ, equally bad.

The most frequently fatal of all the sequelæ to scarlet fever undoubtedly is inflammatory renal troubles. Mild cases are as apt as severe ones to be followed by disquamative nephritis. From two to six weeks is the usual period during which this condition appears after the onset of scarlet fever. The urine should be carefully examined always before ceasing to visit these cases, for albuminuria often commences early but very insidiously, and a confirmed case may be present before we are suspecting it, and, in fact, many days of progress may have been made before external evidence is shown, as bloating, etc. I am sometimes surprised that more cases do not occur, when we consider how little legitimate duty the skin has done during an attack of scarlet fever, and how much greater the amount of labor imposed upon the kidneys.

Rheumatism about the wrists, elbows, knees and ankles very often supervenes upon one attack of scarlet fever, but as a rule it is not protracted, for in four or five days at most it disappears about as suddenly as it came, but when it affects the heart and pericardium, as it sometimes does, it is not so readily gotten rid of. I can call to mind cases of months, and even years of suffering from this cause. This condition is often overlooked by practitioners, and patients have heart troubles of this character without even suspecting it themselves, who only become cognizant of it when it is disclosed by an examination for some other trouble. Then they well remember having had shortness of breath and palpitation on running or ascending a hill or a flight of stairs. Where rheumatism has shown itself at all, it is well to carefully auscultate the heart to determine whether trouble exists there.

Paralysis is not as frequent as after diphtheria. I have seen a severe case in a seventeen-year-old girl under my care during the past summer. It was confined mostly to the lower limbs, though not entirely. She recovered, but it had a duration of several months. Some writers mention as having observed the superintervention of other diseases during the progress of scarlet fever, as measles, whooping cough, typhoid fever, variola, diphtheria, etc.

The latter I have often seen occur about the time that the eruption began to fade away, but I have always regarded it as a manifestation of the same poison, and not a distinct disease. I have also had cases which ran on into a typhoid condition for two or three weeks, but I never regarded them as true typhoid fever.

As regards the treatment of scarlet fever, I am opposed to its being active in mild cases. Very little need be done, further than to clear the sick room of everything unnecessary. Place the patient in the middle of the room, if possible, where he can have plenty of fresh

air and light. Let the covering of the bed be light and porous, never allow a padded coverlet to be used. Many of them will hold water as well and long as a rubber cloth, and consequently will not allow a particle of evaporation to pass through them, and keep all the surface emanations to be retained in the bed. A sheet of cotton or linen, with two thicknesses of flannel, are sufficient for any season. Sponge the body all over, under cover, three or four times daily with tepid water, give a moderately strong solution of potass. chlorate, or a little ammonia carbonate in syrup, with light diet, such as milk and water, or some of the malt foods. This is about all that is necessary in a mild case. When the more severe symptoms present themselves, as high temperature, rapid pulse, delirium, etc., active treatment must be perseveringly employed, until the graver symptoms are moderated and brought under control, if it be possible to do so.

I believe with Dr. Wood, that an emetic of ipecac in the early stages does great good. Nature seems to set an example, for very many cases are ushered in with vomiting, and a calomel purge following an emetic certainly eliminates a greater amount of poison than can be thrown off in the same time in any other manner. Patients are not prostrated by this course, though some might think they would be, but experience positively proves to me that they are not, and getting rid of the impure contents of the alimentary canal is a gain instead of an injury. After this one cathartic, nothing but the most gentle laxatives should be allowed, and these not more than every other day. Tepid sponging is needed in all the severe cases. It is a great comfort to the patient, and can scarcely be used too much, if care be taken to do it under cover. Internally, I almost always give potash chlorate with tr. ferri. mur. One dram of the former, three drams of the iron, and four ounces of water. Of this

I give a teaspoonful in water every two hours to a child ten years old. It can be used as a gargle also with as good effect as anything I know of. In malignant cases, where the breath is wretchedly fetid, the potash permanganate is the remedy, given internally and used as a gargle. I have never found anything to compare with it. Solution of chlorinated soda does well, but it is not equal to the permanganate; nor is carbolic acid.

I think it should be used in all cases that show considerable exudation in the throat, at least it is safe to do so. Ammonia carbonate I regard as a most valuable remedy in almost all cases, on account of its stimulating qualities and its action upon the skin, kidneys and bronchia. Given in thick syrup, I find no difficulty in its administration to very young children. Quinine, alcoholic stimulants, and concentrated nourishment, at times, will be freely used by the judicious physician. In the treatment of albuminuria, which follows as a sequel to scarlet fever, I always use the old reliable remedy—calomel. I would as soon think of driving a wild horse without reins, as to successfully bring about relief from this condition without it. One or two active cathartic doses will, in the great majority of cases, be sufficient. It will act upon all the secretions more effectively than with any other known remedy. Mild and gentle diuretics will finish the cure. Pilocarpine and jaborandi, fluid extract, are powerful remedies for the removal of dropsical accumulations, but they are more severe and less safe than calomel. If the mercurial fails to reach the case, I should at once resort to the pilocarpine, digitalis and potash acetate. Since no scarlet fever patient is insured against the danger of becoming affected with some form of its sequelæ, the greatest care must be observed as to the clothing, exposures, etc., for at least six or eight weeks after convalescence seems to be established.—*Standard.*

PLASTER OF PARIS IN THE TREATMENT OF FRACTURES.

BY W. F. WESTMORELAND, JR., M. D., ATLANTA, GA.

For hundreds of years surgeons have been casting about, and instrument and fracture appliance makers have been taxing their ingenuity, for the purpose of devising some plan by means of bandages, splints or fixtures, to hold the fragments of a fractured bone in their normal position, that union might properly take place, and thus prevent any deformity; so restoring the limb to its normal appearance and functions.

To mention the various devices, splints and appliances that have been suggested within the past century, would fatigue without instructing and interesting you. They are on record in magazines, medical journals, books on surgery and fractures, and we must refer you to them for further information on this subject.

The object of this paper is not to discuss the various appliances adopted by different surgeons, but to present to you what I regard the best plan; one that shows results in every particular more satisfactory to the surgeon and patient than any other plan that has been presented in the past or present. I allude to the plaster of Paris splint. It is not every plaster of Paris splint (so called) that is applied to the fractured bone that does well. It must be properly applied, of appropriate material, with the fragments of the fractured bone properly adjusted to give the results which are so much to be desired. For a time this splint was used only in simple fractures, but now, as will be seen later in this paper, we use them in comminuted fractures, with the very best results, often saving a life or a limb that was formerly sacrificed to the knife, or other plans of treatment that resulted in the death of the patient. To obtain the best results it must be properly applied, and I will now give you the details of its application and the plan that I adopt. For simplicity,

I have divided this paper into "Preparation of Material," "Treatment of Simple Fractures," and lastly, "Treatment of Compound Fractures."

PREPARATION OF MATERIAL.

The bandage should be made out of ordinary cross-barred crinoline that has had all the starch thoroughly washed out. The starch not only makes the crinoline very stiff and prevents its holding enough plaster, but also keeps the plaster from setting. Crinoline is better than gauze or cloth; the gauze pulls unevenly, and the meshes of the cloth are too fine to hold enough plaster to make a stout splint. Select the best plaster, and get it in unbroken cans; always test it by adding a little water to it, and see that it sets properly and quickly before using it. Put a small quantity of plaster on a table and rub it thoroughly into the meshes of the crinoline, and having an assistant to loosely roll the bandage as you rub. See that the plaster is evenly and smoothly distributed over the bandage. Rub the plaster into the bandage by hand. None of the machines that I have ever seen for this purpose are worth the room they occupy. I prepare a large number of bandages at a time, having two or three widths, and pack them in a bucket, made air-tight. If placed in a dry place, they will keep for an indefinite length of time. Next, you will need flannel roller bandages. It will not do to use cotton under the plaster, as it is not comfortable to the patient, and is constantly kept damp by perspiration, and becomes offensive and often excoriates the skin. I use a medium heavy red flannel for the bandages. Add to this a few pieces of perforated tin slips and a tape line, and we are ready for the operation.

To better illustrate the application of a splint, we will take a case from practice. I receive a call that "Tom Jones

has broken his leg. Come out at once and fix it up." "Get things ready to set a fractured leg," I call to my assistants. In five minutes the things are all packed in a satchel, and we are on our way to the patient. But pause a moment, and we will look at the contents of the satchel. It contains a bucket of plaster of Paris bandages, a pound of ether, a few narrow strips of perforated tin, a tape-line and a pair of scissors. We reach the patient, and find that Tom is a very stout, muscular man, weighing about two hundred pounds. An examination reveals an oblique fracture of the upper third of the right thigh, with two inches shortening. We immediately proceed to work; one assistant etherizes the patient, and the other gets things in order. An old sheet is put down by the bed to cover the carpet; on it, in easy reach, put a basin of cold water; place the plaster bandages close beside the basin, and have the flannel bandages at hand. While this is being done, I secure a few large books, tie them securely together, then wrap a towel around a broom-stick and fasten it. By this time Tom is etherized. I put the broom-stick down inside the side railing of the bed between two of the slats, upright, while the end of the handle rests on the floor; an assistant holds it in this position. Now we pull Tom across the sides of the bed his buttocks rest on the edge, while his legs hang over it, with the broom handle between them, pressing against the perineum. I have Tom lifted, and put the book under his left buttock. This keeps him raised high enough for me to get around the pelvis with my bandage.

The assistant begins to make slow and steady extension; the counter extension is made by the broom-handle, held firmly against the perineum. The towel wrapped around the broom-handle protects the perineum from injury. The slow, steady extension is kept up

until the fracture is reduced; I hold both legs up side by side, and satisfy myself by exact measurement with the tape line, that both legs are the same length; keep up the extension all the time the bandage is being applied.

A flannel roll bandage is now applied, including the foot and extending up the whole length of the leg and around the pelvis, taking care that the bandage lies perfectly smooth — without any wrinkles.

I take a plaster bandage out of a basin where it has been previously placed, end upwards, with water enough to completely cover it, and squeeze out the *excess of water*. As the bandage is taken out of the basin, have a fresh one put in, and it will be ready by the time the former is used. The evidence that it is ready for use is that the bubbles of air have ceased to escape. The plaster bandage is smoothly applied over the flannel in the same manner that an ordinary roller would be, making the reverses whenever necessary. Do not pull the bandage, or try to exert pressure. Carry the bandages up the leg, including the foot and around the pelvis. As the bandages are applied, rub them thoroughly with the hand to squeeze out any air that may have gotten between the layers, and to rub the soft plaster into the meshes of each succeeding bandage. Make a number of extra turns around each joint, and work in a piece or two of perforated tin, letting them extend from below the knee to the crest of the ilium, to strengthen the splint at those places, where the greatest strain exists.

There is no rule as to the number of layers to apply, but it must depend upon the character and seat of the fracture, and the muscularity of the patient.

Within a couple of hours of the receipt of the injury the splint is applied, and when Tom recovers from the effects of the ether, he finds that he can turn in any direction, and occupy almost

any position without pain. In fractures of the thigh, I do not let them out on crutches for the first week.

There are several points in the application of the plaster splint that I wish especially to emphasize. The most important is the immediate application of the splint. This has been bitterly opposed, by most of our book-makers especially. They, almost without exception, advocate waiting for a greater or less time until the swelling has subsided. What are the advantages of waiting? It is claimed that by waiting till the swelling subsides, the numerous accidents that are said to follow the immediate application are to a certain extent eliminated.

If there was no other argument, it suffices to say that the most of the men who advocate the plan of waiting, are the very men in whose hands these accidents occur, who report them, and who abandon this method with dissatisfaction and disgust. I think I understand this principle better than those with pre-conceived conclusions do. Experience is an excellent spy-glass; but it has this draw-back, that prejudice very often clouds the lens. One of our able book-makers is not even able to give personal experience as a reason for his prejudice, but he abuses and condemns this, as he does other splints, that he may better advocate his own.

His opinion, in this respect, reminds me of the founders of Lynn, Mass., who after exploring ten or fifteen miles, doubted whether the country was good for anything farther west than that.

There must be some reason for these failures. What are they? Surgeons who adopt the plan of waiting before applying the plaster splint, will resort to any temporary expedient to control the fractured bone. Unfortunately, the fracture is never controlled by these devices. The fragments are not held in apposition, the sharp ends of the fragments are continually piercing the soft parts with every movement of the pa-

tient and every spasmodic movement of the muscles. The result of this continued irritation is inflammation and swelling. After a time the swelling subsides sufficiently to suit the surgeon, and the plaster splint is applied. Later, and often before the bones unite, the swelling disappears—the splint being too loose to retain the fragments in position, the union is retarded, and when the bone at last unites there is often more or less deformity, and if it be an oblique fracture, the limb is shortened.

In the immediate application, the limb has not had time to swell, extension is kept up until the limb is inclosed in a splint that is accurately moulded to all the irregularities of the limb, both joints connected to the injured bone are fixed by the bandages being moulded into the bony prominences and depressions. This perfect adaptation of the splint to the inequalities of the limb absolutely prevents all motion, makes shortening an impossibility, and secures the complete immobility of the limb in a position in which it is put up. The fragments are held in perfect apposition. It is impossible for the ends of the broken bone to puncture and irritate the surrounding muscles. There are no spasms of muscles, no irritation; therefore it is impossible to have any inflammatory turgescence or swelling, and there is little danger of the splint getting tight. I have put up a fractured thigh where eight inches of the bone had been comminuted by a car wheel. Another, a compound fracture of both of the thighs by a street car wheel. Another, fracture of the upper third of the thigh, with a fracture of the lower third of the same bone, with separation of the condyles. In neither of these was there any tightness, nor did the splints have to be removed, although in each case the splint was put on immediately after the injury. Watch the patient closely. Don't put on a splint and not

see it for two or three days. Leave instructions that if the splint feels too tight, or the patient's foot or toes get cold or swell, to send for you; you may have to make many unnecessary visits, as I have done, but in these cases it is better to make numerous unnecessary visits than to fail to make the one that is necessary.

I always use an anæsthetic in the reduction of any fracture that requires considerable force. The principal cause of trouble in the displacement of fractures is the muscular contraction, and in reducing them, one main difficulty is to overcome this muscular action. No amount of extension or counter-extension will bring the fragments into position, much less retain them there, unless all muscular influence is removed. As this is true, the most natural way to overcome it is to etherize the patient. This does away with all possibility of having to use pulleys. The patient suffers no pain; is perfectly quiet, which is very important. There is no sudden contraction of the muscles at the wrong time. Never use pulleys to make extensions, or you will be apt to put up the limb in a bad position.

COMPOUND FRACTURES.

No compound fracture by itself, no matter how extensive the comminution, is an indication for primary amputation, unless there is an accompanying irreparable destruction of the soft parts, including the large blood vessels. No doubt this seems an extreme principle to enunciate, but my experience in the treatment of compound fractures by this method has convinced me that many limbs have been sacrificed to the surgeon's knife, which, had they been left (on), would have been of infinite value to the patient. Nor is any argument needed to convince any one, "especially the patient," that it is better to leave the limb in its natural position than to remove it, and bury it forever out of sight. John Hunter said, two hundred years ago, "Surgery consists in curing

a disease, rather than in a removal of it by mechanical means." But so differently do most people think on this subject, that a surgeon who performs the most operations and gives the most pain, is commonly thought the best.

When called to a compound fracture, I immediately etherize the patient, and am better able to reduce the fracture without muscular resistance, and retain it in muscular position; also to more thoroughly cleanse the wound.

Upon the thorough antiseptic cleansing of the wound and surrounding parts, and complete removal of all foreign and irritating matter, depends the quick and successful issue of the case, and in some instances even the life of the patient.

In no case that we are called upon to treat, is a disregard of antiseptic details so inexhaustible as in these. As soon as I see the patient, I cover the wound with a towel wrung out in bi-chloride sol. (1,500) and while the patient is being etherized, I cleanse the surrounding parts the same. When the patient is thoroughly etherized, I reduce the fracture, making the opening larger, if necessary, for the easy replacing of the bones. Then I cleanse the wound, cutting the tissues until I can reach and touch every part of the wound with bi-chloride sol. For this I generally use (1.500) and afterwards wash it off with a weaker sol. (1.2000). Sol. always means bi-chloride. The instruments should be kept in carbolized sol. (1.30 or 40). All arteries should be ligated with cat-gut sutures. Establish drainage either with rubber or bone drainage tubs, or cat-gut drains. Over the wound, place a thick layer of antiseptic gauze, and apply the flannel bandage, followed by the plaster of Paris as previously described. I am no advocate of heavy dressing under the splint, as I think this is sometimes the cause of accidents, by preventing the splint keeping the bones in apposition. I would rather cut a trap door in the splint and re-dress through it, as I have done successfully in a number o

cases. I have been very much surprised that Scede's method of union has not been advocated in these cases, and I take this opportunity of advising it, especially in those where it is a great destruction of the soft parts. For as Gerster says, its simplicity and independence of the presence or absence of a sufficient covering of skin, commends it to the surgeon.

Scede's method consists in making use of the organizing power of the moist blood clots. He thus supplies the wound with a plastic material, rendering both drainage and compression necessary. Important arteries should be tied, the filling of the wound with blood being left exclusively to parenchymatous hemorrhages. When there is enough skin to close the wound, a small opening should be left at the upper angle to allow the drainage of superfluous blood; a piece of rubber tissue without any holes

in it is placed over the wound, extending a small distance beyond its edge; this must lie closely and smoothly, and serves the double purpose of securing the complete filling of the wound with blood, and of preventing drying and evaporation, as well as keeping the bandage from absorbing any but superfluous blood. Then the rest of the dressing is the same as in other cases. It will be found that the blood in all parts of the wound will coagulate and will be gradually replaced without further secretion, by a permanent tissue.

Dennis, in *Medical News*, November 13, 1886, reports 385 cases of compound fracture, with but one death, giving a mortality of less than one-third of one per cent. Previous to the adoption of antiseptic methods, the rate of mortality in the best of tables varied from twenty to sixty per cent.—*Atlanta Med. and Surg. Journal.*

CHRONIC HEADACHE.—At the recent meeting of the Medical Society of the State of New York, Dr. C. I. Dana, of New York, read a paper entitled "Chronic Headache" (*Medical Record*, February 9, 1889.) It was based on a study of two hundred cases of chronic headache, functional in character, excluding migraine. His conclusions were:

1. There should be more general recognition and differentiation of chronic head-pains of functional origin.

2. Pains in the head are either neuralgias, migraines, or so-called headaches.

3. The seat of headaches is always in or referred to the trigeminal, vagus, or four upper cervical nerves.

4. Headaches are seated in or referred to the periphery of the nerves in question; neuralgia is seated in the trunks or central; migraine is a periodical discharging neurosis, affecting

motor, vaso-motor, secretary, as well as one or more cranial sensory nerves.

5. The dura mater is the most frequent seat of headache.

6. The great headache ages are from eight to twenty-five, and again from thirty-five to forty-five; childhood and old age are exempt.

7. The chronic functional, non-migrainous headaches may be classified haemic, including diathetic forms, toxic, dyspeptic, neurotic, reflex.

More exact knowledge of the nature of headaches may be gathered by studying the location and character of the pain in its relation to cause. Neurotic headache is best treated symptomatically by antipyrin, menthol, anti-febrin, caffeine and bromides. Headaches due to reflexes are often treated better constitutionally than by means directed to local conditions. Rheumatic headaches are best treated by ammonia, chloral and warmth.—*Ther. Gazette.*

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EDITORIAL.

THE ILLINOIS STATE MEDICAL SOCIETY.

The approaching meeting of the Illinois State Medical Society at Jacksonville, May 21-23, will be one of the most important ever held. Aside from the central location and easy accessibility of the beautiful city of Jacksonville, with its many attractions in the way of State institutions, this meeting should be attended by every physician who has the welfare and success of this organization at heart. At that time a draft of a new constitution will be presented to the society for their approval, embracing many changes which have been thought by the committee to be for the best interests of the society.

To build up a State medical organization, especially when it is considerably run down, is a difficult matter. One of the first requisites is a large membership and a large attendance. To secure this, many things must be taken into consideration and many interests thought of. A purely medical feast is not sufficient, and never will be. Some attend through curiosity to see

other medical; some to hear the papers and their discussion; some make the meeting take the place of a vacation and relaxation, and these are attracted by outside entertainment other than purely medical. Now, if to these various incentives could be added two more,—namely, a pride in belonging to a flourishing society, and secondly, a personal, pocket-book interest,—the society would not lack for membership and attendance. This gained, it will be the fault of the officers and leaders only if the interest and attendance is not kept up.

A factor of no small importance in decreasing the attendance at the State society has been the multiplication of district societies embracing several counties. These societies have two meetings a year, and the spring meeting is held at about the same time as the State society. An effort should be made to bring these district societies into closer affiliation with the State society. This might be done by making

them branches of the larger body, holding fall sessions and arranging the territory embraced by each so as to include every county in the State.

The shape of this State renders it difficult to bring out a large attendance at the yearly meetings; in fact the southern half of the State is but very sparsely represented in the State society. This is due to two reasons—first, the number of cities large enough to provide for the meeting of the State society is much greater in the northern than in the southern half, hence the society is much more frequently held north of Springfield than south of it; the second reason is that St. Louis and St. Louis' influence is dominant over that part of the State nearer to that city, and from a business point of view it is to the interest of the St. Louis colleges and journals to foster local medical societies in Southern Illinois, to the great detriment of the State society. This feeling of antagonism must be overcome and the members of the profession south of Springfield be made to feel that they belong to Illinois, not

Missouri, and that it will be to their interests to cultivate closer relations with their brethren in the northern part of the state, and this can only be done by means of a State organization.

Partially in the hopes of remedying this, the committee on revision will propose that each alternate meeting be held in Springfield, which city is as near the geographical center of the State as can be found large enough to entertain the society. Another reason will be advanced for selecting Springfield, and that is, as Springfield is the capital of the State meetings of this society held there during the session of the legislature will assist in securing for the profession more influence with the legislature and the consequent enactment of such laws as will benefit the profession. These, with other proposed changes in the constitution, will be placed in the hands of the members of the State society before the time of the May meeting, and it is to be hoped that they will receive careful consideration and cause a very large attendance.

AN ACCIDENT AND A CORONER'S VERDICT.

A young medical man of the homœopathic persuasion residing in this city has become the means of causing an unqualified condemnation of that useful appliance known as "Barnes' uterine dilator." Being called to a case of labor, for some reason unknown to us he proceeded to dilate the os uteri with a Barnes' dilator, the instrument burst and the woman died in a moment. It is said that the cause of death was the

entrance of air into the placental sinuses, although how this was arrived at we do not understand, as the child was unborn and the membranes intact, besides we believe the post mortem was not extended to an examination of the heart. But be that as it may, the accident was the occasion of a coroner's inquest being called, and after hearing the evidence a verdict was arrived at to the effect that the patient died

through an accidental breaking of Barnes' dilator, which instrument is entirely unsafe, and its further use by physicians is condemned. Woe to the next man who is bold enough to use Barnes' dilator.

THE JOURNAL OF THE A. M. A.

A short time ago it was announced that Dr. N. S. Davis had resigned the position he had so ably filled as editor of the *Journal of the American Medical Association*, and that the trustees had elected Dr. John B. Hamilton to fill the position. In order to accept, Dr. Hamilton resigned his position as Surgeon General of the Marine Hospital Service, said resignation to go into effect in six months. Now we learn that since Congress has made the Sur-

geon Generalship of the M. H. S. a life office and increased the salary, Dr. Hamilton has withdrawn his resignation and resigned the editorial charge of the *Journal*.

It looks mightily to us like a piece of political juggling, and that the editorial change was only a scheme to force Congress to take the action that was taken. If this be so, the American Medical Association should resent and condemn the action of Dr. Hamilton.

EDITORIAL CHANGE.

We learn with regret that Dr. J. J. Mulheron has withdrawn from the editorial charge of the *Medical Age*. We sincerely regret this change, for Dr. Mulcheron has for years been looked upon as one of the best medical editors in the country. His style was simple, but almost perfect, and he was considered one of the best, if not the very best, paragraphers connected with the medical press. We shall miss his keen

satire and trenchant wit, but hope that the fascinations of editorial writing will not permit his retirement to be permanent. Where could the trustees of the *Journal of the American Medical Association* find a man more capable of filling the now vacant chair of their organ? Dr. Mulheron would give it the life and character such a journal should have, but which it has not yet attained.

A MEDICO-LEGAL SOCIETY.

A Medico-Legal Society has been organized in Belgium. At present the only medico-legal laboratory that exists in Belgium is attached to the University of Gand. Dr. Vleminckx, of

Brussels, is President of the new society, and Dr. C. Moreau, of Charleroi, Secretary. The society begins with a membership of 40 physicians.

PERISCOPE.

CONTRAINDICATIONS FOR THE USE OF ANTIPYRIN DURING THE MENSTRUAL PERIOD.—Cases of toxic accidents from the use of antipyrin have been frequently reported, but the conditions under which these results are produced have not been sufficiently studied. Without doubt, in some cases the poisonous effect is to be attributed to the poor quality of the drug, but the condition of the patient also deserves consideration. In the *Revue de Clinique et de Therapeutique* for January 24, 1899, Dr. H. Huchard states that a year ago he administered fifteen grains of antipyrin to a woman suffering from violent dysmenorrhœa. As the result of the administration of this drug, the menstrual flow was suddenly arrested. The patient was seized with violent chill, chattering of the teeth, the face became cyanosed, and there were frequent attacks of syncope, the pulse was small and weak, and the patient complained of great headache. The condition was such as to cause great anxiety for nearly an hour, when the effects gradually passed off. Dr. Huchard thinks that he has in two other cases observed similar symptoms, although less marked, and he now regards the presence of the catamenial flow as a positive contraindication to the use of antipyrin.—*Ther. Gazette.*

THE INFLUENCE OF CERTAIN MEDICINAL AGENTS UPON THE BACILLUS OF TUBERCLE IN MAN.—Although the inefficacy of treatment in almost all cases of tuberculosis (pulmonary and laryngeal), and its almost certain fatal issue in most instances, are sad truths, still few of us care to confess to ourselves the fact of its incurability, and fewer are bold enough to record the apparent uselessness of all treatment.

Dr. G. Hunter Mackenzie, in the *Edinburgh Medical Journal* for January, 1888, has stared the truth full in the face. In the beginning he brings

forward the fact that the number of tubercle bacilli found in the sputa of any case does not seem to bear any reference to the severity of the case. A case may go on for years with an enormous number of bacilli found at every examination. This seems very plausible. The fact that the bacilli seem to grow less at each examination may not indicate an improvement. For naturally when the larynx is the seat of disease the sputa must swarm with bacilli, while in a lung lesion alone the bacilli-laden secretions, coming from a greater distance, may pass in other directions, as in other parts of the lung or in the stomach.

As the treatment is directed against this primary cause of the disease, the only way to influence the bacilli is by climate, by general or by local remedies. He has seen climate cause improvement for a time, but he has never yet witnessed the complete disappearance of tubercle bacilli follow on or be induced by climatic changes. Dry climate, with the minimum variation of temperature, is most favorable, a low temperature diminishing the amount of expectoration and the bacilli. The latter, however, seem almost always to be present, for even when the non-ulcerating tubercular laryngitis can not be distinguished from a simple chronic laryngitis, the presence of the bacilli, as many of us know by experience, will alone make the diagnosis.

It is not difficult to select a host of bacilli destroyers, but an efficient antiseptic must be destructive to the bacillus and innocuous to the host. He has tried all possible antiseptics in spray in as strong a solution as feasible, and all in vain. Dry inhalations are objected to on account of their dessicating and irritating effect upon the laryngeal mucous membrane.

According to the experiments of MM. Filleau and Leon Petit, the tubercle bacillus is one of the most re-

fractory of all micro-organism to the action of the most destructive agencies. It maintains its virulence after lying for forty days in putrid sputum, and for one hundred and eighty-six days from contact with air. It can live at a temperature between 86° F. (30° C.) and 104° F. (40° C.). The bacilli may be destroyed, but the spores are so tenacious of life that the most violent means, such as prolonged boiling, steaming, etc., are alone capable of rendering them inactive. Corrosive sublimate itself is powerless to disinfect the sputum. Tuberculosis may seem to be cured at times, but the spores are only lying latent. In view of these facts scepticism as to the cure of pulmonary or laryngeal tuberculosis may be pardoned.—*Maryland Med. Jour.*

HOT-AIR INHALATIONS IN PHTHISIS.—If one is to accept the statements of Dr. A. L. Stern at the last meeting of the Section on Practice of the New York Academy of Medicine, the desideratum that has been so long and so fruitlessly sought for, a positive cure for pulmonary tuberculosis, has now been attained. This cure, Dr. Stern claims, is effected by Dr. Weigert's hot-air inhalation apparatus, which he exhibited, and the use of which he explained. It is simple in construction, consisting of two copper cylinders, one within the other, and the air to be inhaled, which is heated by means of a Bunsen burner to a minimum temperature of 212°, and thus rendered perfectly aseptic, passes up between the two. The inhalation is to be used for four hours each day—two hours at a time—and it can be taken either in a sitting or reclining posture. It is advised, however, that when first commencing the treatment the patient should use the apparatus for thirty minutes only twice a day. The temperature of the air inhaled is gradually increased from 212° to as high a point as the patient can bear without suffer-

ing inconvenience, 482° being the highest temperature as yet reached in any case in these inhalations.

As a result of the hot-air inhalation, it is claimed, there is an acceleration of the pulse, while there is diminution in the frequency of the respirations, and inspiration becomes deeper. There is at first an elevation of the body temperature, the rise being from 1° to 2°, but after about an hour the temperature again subsides. Under the continued use of the inhalations the difficulty of breathing incident to consumption is soon markedly relieved, and there is at first a lessening, and then a total cessation of cough. There is at first an increase, then a decrease, and finally total disappearance of expectoration. All catarrhal symptoms disappear, as do the fever and night-sweats. There is a clearing up of the infiltrated portions of the lungs, and cicatrization of cavities, when these exist, is brought about; while the strength, weight and appetite of the patient gradually increase. The microscopic examination of the sputa generally shows at first an increase in the number of the bacilli tuberculosis, but afterwards there is a total disappearance of the bacillus, and a complete cure is effected. The shortest period in which total disappearance of the bacilli has been noted is four months. This method of treatment, Dr. Stern said in conclusion, has now been employed in 150 cases, 50 of which were published in Vienna.

All this reads like a fairy tale, but it can be safely assumed that it will not be long before the method has been given a sufficiently extended trial to enable the profession to decide upon its merits. Dr. Weigert, the inventor of the apparatus, is a graduate of the College of Physicians and Surgeons of New York City, and is now residing in Berlin. We learn that Dr. Trudeau, of Saranac Lake, N. Y., has already used the hot-air inhalations with success in a number of cases. There is but

little doubt that this method of treating phthisis will be extensively tried. It is to be hoped that the trials will be as careful as extensive, so that whatever of value there may be in the method will not be vitiated by any wrong conclusions drawn from improper and careless experiments and administrations. — *Jour. Am. Med. Assn.*

THE MEDICAL TREATMENT OF EPITHELIOMA OF THE CERVIX UTERI.—Let me say a few words with reference to the medical treatment of these cases. First, with reference to the use of morphia. The physician who withholds morphia from a patient suffering pain from a cancer, is cruel. Usually no pain is experienced until the disease reaches the internal os and invades the body of the womb. Then the woman may suffer the tortures of the damned. The most terrific pain, the most acute suffering that I have ever seen was in a woman, with cancer of the womb, who, the day before she died, took thirty-five grains of morphia by the mouth, and even this gave but little relief. It is the duty of the physician to allow the patient to have as much morphia as is needful to make her comfortable. She has but a few months to live, why not make them as free from suffering as possible? I begin with suppositories, sometimes first using belladonna, but more frequently opium. When these have to be repeated more frequently than is convenient, I resort to morphia by the mouth, giving small doses and gradually increasing as necessary. If an interval of two hours is allowed to elapse between each dose there is no danger of doing harm. When her end approaches, give her an easy death—euthanasia, as the ancients called it. Ergot and arsenic are also of service in the general treatment of this cruel disease. Ergot causes contraction of the uterus and tends to lessen the rapid growth

of the cancer by diminishing the supply of blood. Arsenic certainly does tend to repress malignant diseases, and cures of cancer from its use have been reported. If there has been loss of blood, there is no objection to giving iron.

There is one local application which I have found of service in cases of epithelioma of the cervix, and that is fifteen grains of bi-chloride of mercury dissolved in one ounce of collodion. I am sure that in one case I effected a cure by this application, after the amputation of the cervix.

When the cancer has not advanced too far, and the womb is movable and not fixed by the disease, the best treatment is the radical one of removing the whole womb by vaginal hysterectomy. This operation I will not now describe, as we shall have some cases of it before the session is over.—*Col. and Clin. Record.*

CHRONIC HEADACHE.—At the recent meeting of the Medical Society of the State of New York, Dr. C. L. Dana, of New York, read a paper entitled “Chronic Headache,” (*Medical Record*, February 9, 1889). It was based on a study of two hundred cases of chronic headache, functional in character, excluding migraine. His conclusions were: 1. There should be more general recognition and differentiation of chronic head-pains of functional origin. 2. Pains in the head are either neuralgias, migraines, or so-called headaches. 2. The seat of headaches is always in or referred to the trigeminal, vagus, or four upper cervical nerves. 4. Headaches are seated in or referred to the periphery of the nerves in question; neuralgia is seated in the trunks or central; migraine is a periodical discharging neurosis, affecting motor, vaso-motor, secretory, as well as one or more cardinal sensory nerves. 5. The dura mater is the most frequent seat of headache. 6. The great headache ages are

from eight to twenty-five, and again from thirty-five to forty-five; childhood and old age are exempt. 7. The chronic functional, non-migrainous headaches may be classified as anæmic, including diathetic forms, toxic, dyspeptic, neurotic, reflex.

More exact knowledge of the nature of headaches may be gathered by studying the location and character of the pain in its relation to cause. Neurotic headache is best treated symptomatically by antipyrin, menthol, antifebrin, caffeine and bromides. Headaches due to reflexes are often treated better constitutionally than by means directed to local conditions. Rheumatic headaches are best treated by ammonia, chloral and warmth.—*Ther. Gazette.*

THE RATIONAL TREATMENT OF STRICTURES OF THE MALE URETHRA.

—In a communication published in the *Post-Graduate*, Dr. J. H. Girdner states that "The so-called gradual dilation treatment is a misnomer as applied to strictures of the penile portion. It conveys only the idea of stretching, while the most important element in it is the pressure it exerts on the connective tissue surrounding the tube. One of the simplest and best known laws of nature is that pressure on a part causes absorption. We, therefore, take advantage of this law, and the fact that the tissues around the penile portion of the tube are comparatively firm, and offer a certain amount of counter-pressure. It is his rule also, to aid this counter-pressure by allowing each instrument to remain in the urethra for five minutes or more, and during this time to make a gentle but firm pressure over the seat of the stricture by squeezing the penis at this point between the thumb and finger, carrying the manipulation all around the organ. In cases in which the deposit of cicatrical tissue was so large that it could be felt as a small, hard tumor around the point of stricture, he has been able to note its

gradual disappearance from day to day under this treatment. After much experience with this method, he has yet to see a stricture of the penile portion which failed to yield to it, and when dissipated in this way the stricture has not returned in two, three and five years after all treatment was discontinued, as is proven by some of his own cases. This he holds to be the only rational and successful treatment of strictures in the penile portion. With regard to stricture of the deep urethra, the author says that gradual dilation and pressure, so successful in the penile portion, will cure only a limited number of strictures when they are situated in the bulbous and membranous portions. The reasons for the failure are, because strictures in these portions are, as a rule, very tight, the open space around the tube here allowing of a large deposit of connective tissue; and, furthermore, this same laxity of the surrounding tissues prevents us from getting the counter-pressure, when solid sounds are passed, which the more compact tissues around the penile portion offers, and the location of the tube here also prevents us from making counter-pressure by proper manipulation, which we found so useful in the penile portion. Except, therefore, in cases where the stricture is of recent formation, with only a small amount of cicatrical tissue opposite the point, gradual dilation and pressure will prove, at best, only palliative in strictures of the deep urethra. Perineal section, or external urethrotomy, is an operation almost entirely void of danger and, when properly performed, it may always be depended upon permanently to cure strictures in the membranous and bulbous portions of the urethra. It has been so successful in my hands that I have come to feel justified in promising my patients a permanent cure in ten to fourteen days from the date of the operation. External urethotomy is free from the dangers and inconsistencies of the internal operation. Its proper per-

formance contemplates and accomplishes the most simple and rational means of relief, which is to incise externally the urethral wall at the point of constriction, and introduce in the incision a wedge of sound tissue sufficiently large to restore the tube to its normal calibre. It is not difficult to accomplish this. His rule is to cut in the center of the perineum, reach the stricture, freely incise it, cutting into the sound tissues on both sides for a fourth or half an inch. then pass from the meatus to the bladder a hard rubber catheter of the size of the normal urethra and tie it in position. This causes a gaping of the walls of the incision, and prevents their primary union. The extent of this gaping is the correct measure of the wedge of sound tissue which is to be introduced into the circumference of the tube. This wedge is secured by the final union of the granulations which, by thus keeping the walls apart, are made to spring up on the two walls of the incision. After thirty-six hours the catheter is removed and the urine allowed to drain from the bladder through the wound, and this, together with the passage of a sound of the size of the normal urethra, is sufficient to insure the formation of a proper-sized wedge of granulation tissue. Strict asepsis is, of course, observed throughout the operation. —
Med. Rec.

LARGE DOSES OF CALOMEL IN PNEUMONIA AND CROUP.—In the winter of 1885 and 1886, Dr. E. T. Strong, M. D., was led, by an editorial in the *Medical Record*, to try large doses of calomel in croupous pneumonia.

The results were so good that I have continued to use it, the number of my cases being now about twenty. All were in the stage of exudation, with high or rising temperature. In age they ranged from eight to over sixty years. In severity, from cases which would

have recovered under any treatment, to those that I considered desperate. In every case there was immediate improvement in temperature, respiration and heart's action, subsidence of the disease in twenty-four hours, and, with one exception, rapid recovery, little or no stimulating or medication being needed. The exception was under most unfavorable surroundings, but was apparently convalescing, when purpura hemorrhagica set in, and the patient died from nasal hemorrhage. My usual and smallest dose was twenty grains every three hours, in most cases continued twenty-four hours. In one case, which I believed would be fatal, the patient took an initial dose of sixty grains, and thirty grains every three hours, until she had taken three hundred and sixty grains. There was no ptyalism in any case, and but moderate catharsis. One of the most remarkable features in every case was the rapid improvement in the heart's action.

I tried the same plan in three cases which I diagnosed as membranous croup. In two the diagnosis was confirmed by expectoration of shreds of false membrane. In one of these patches of exudation were visible. In the third, an infant of nine months, I was unable to confirm the diagnosis.

All were reported as improving in breathing before the second dose, and all made a rapid recovery. I gave to an infant eighty grains, in ten-grain doses; to a boy aged six years, one hundred and sixty grains, in twenty-grain doses; and to a boy of twelve years, only eighty grains in four doses. I never before had three consecutive recoveries from croup.

These few cases are not enough alone to prove the utility of the remedy, but at least they have convinced me that I can safely give, in similar conditions, doses that a few years ago I should have thought reckles.—*Med. Rec.*

FALLACIES OF STATISTICS.—The fallacious deductions which can be drawn from a consideration of statistics are well exemplified in some remarks recently published upon the influence of tobacco smoking upon diphtheria. It was shown from statistics by the Vienna municipal authorities that in the last three years the number of women affected by diphtheria was three times greater than the number of male adults, and from these premises the rash conclusion was drawn that tobacco smoking was, to a considerable extent, a prophylactic against diphtheria. The use of tobacco is not, however, the sole or most important difference. It is obvious that the mothers spend more time with their children, and that they are especially liable to infection during the watchful nursing of a sick child. It is also equally clear that, as a rule, the occupations of the female sex keep them more strictly confined to perhaps unsanitary houses, while the males leave these ordinarily to work in factories or in the open air. The probable influence of these conditions must be reckoned with before credence can be given to the prophylactic action of tobacco based upon statistics rather than experiment.

—*London Lancet.*

Poisons Should Be Labeled.—An inquest was held by Coroner Ashbridge, on Saturday, in the case of Asaphat Surma, thirty-eight years old, 401 North Twenty-third street, who died on Friday of the effects of strychnia, taken accidentally the same day.

H. Bower, who had been working with Surma at John Lang's paper mill, Twenty-fourth and Vine streets, testified that he found the bottle containing about a dozen granules of strychnia. The witness stated that he did not know what they were, and so he ate one or two of them, and Surma took the remainder. The witness added, however, that he spat out almost all he

put in his mouth, but the deceased did not.

The coroner asked the witness if he would have taken the pills if he had seen the word "poison" printed on the label. He answered that he would not.

William R. Warner, of the firm of William R. Warner & Co., manufacturing chemists, 1228 Market street, whose label appeared on the bottle, stated that the latter had contained one hundred granules, one-fortieth grain of strychnia in each. The witness stated that the word "poison" had not been printed on the label, as they were only sold to druggists or on physicians' prescriptions. He said that in the future he intended to have them labelled "poison."

The coroner then read the act of assembly regulating the sale of morphia, strychnia, etc., and said he did not know whether or not it was constructed to apply to manufacturing chemists. He told the jury that "they ought to incorporate in their verdict a suggestion that all druggists, apothecaries and manufacturing chemists should be required to put a 'poison' label on preparations of this character."

In accordance with these instructions and the evidence, the jury returned a verdict of death from strychnia, taken accidentally, and stating that in their opinion all such poisons should be properly labelled.—*Exchange.*

TREATMENT OF FECAL ACCUMULATIONS.—These accumulations are to be treated locally, and it is a mistake usually to give cathartics at first. Enemata are doubtless the most efficient means known of dealing with fecal accumulations. The injections should be copious, and should be given, where possible, in the knee-head, knee-elbow or lateral position. The best material is water at a temperature of about 100° F., though there is no objection to soap and water,

or turpentine and water, or oil. It is advisable to dispense with the use of an anæsthetic, unless the mass is situated low down in the colon, within easy reach from the outside, as the patient's sensations are often of great service as a measure of the force to be used, or the amount injected, and the presence of deep ulcerations cannot frequently be excluded. The fluid, enough to fill the colon, should be slowly introduced and be retained for some fifteen minutes, and the mass be kneaded gently. The best instrument, according to Treves, is the inflator designed by Mr. Lunt, of Manchester, England, as it allows of very large injections without permitting the escape of any fluid from the anus. By its use such enemata can be given without assistance. I have used the ordinary syringe stem with a rubber shield shaped like a doughnut, the central hole being quite small.

Where the seat of the tumor is the cæcum, and accompanied by tenderness and fever, the procedure advised by Harley seems to be the best. After a fair amount of fecal matter has been brought away by the enemata, given every six or twelve hours, he causes the patient to take half an ounce of castor oil, with two teaspoonfuls of brandy and eight or ten minimis of laudanum or deodorized tincture of opium, and repeats the dose after each evacuation produced by the enemata. In this way two or three fecal motions are produced daily, to the great relief of the patient. The tumor decreases and becomes less tender daily, and in cases of ordinary severity the cæcum will be emptied in the course of one week, and the patient restored to convalescence. When there is much pain, a hot flax-seed and mustard poultice should be kept applied to the abdomen. The subsequent treatment should be that of typhoid fever, and for one week or more after all pain and febrile dis-

turbance have ceased there should be no solid food given. If the case is severe and protracted there is a tendency to reaccumulation in the cæcum. To avoid this, an occasional dose of castor oil should be given, a compress worn with a flannel bandage over the region of the cæcum, and massage be made over the part. Strychnia, in some tonic infusion, may be given to promote tone in the weakened intestinal wall.

Where the accumulation is in the rectum, it is sometimes necessary to dig it out with the handle of a spoon or the fingers. A device described by Duke in the *British Medical Journal* would appear to be serviceable at times. It consists of a brass, nickel, or silver-plated speculum armed with a plug, which, when pushed forward allows fluid to be injected into the gut through a hollow pipe at the side. He thus describes its use: The speculum is gently introduced, and when placed the plug is pushed up, which raises the cover and allows the fluid injected to penetrate the mass or accumulate above it, as the case may be. The mass is thus either broken up or soaked and its removal facilitated. When all has passed which will, and still large, hard lumps are present, and form a ball valve, which want of tone in the bowel and abdominal parietes does not allow of the patient being able to expel, he supports the abdomen with a tight roller, and introduces as large a cylindrical vaginal speculum as will pass through the sphincter, and breaks up through it what will not freely pass, by means of a spoon handle. This, he thinks, saves much pain and the frequent introduction of the fingers, which produces so much subsequent soreness and discomfort.

After the mass has been cleared away the case is resolved into treating the condition on which the accumulation has depended, if it be possible to make it out.—*Col. and Clin. Record.*

TREATMENT OF INGROWING TOE-NAIL. — Dr. Theodore Clemens, of Frankfort, strongly recommends the employment of tinfoil in the treatment of ingrowing toe-nail. He first has the toe thoroughly washed with soap and carefully dried. He then envelopes the whole nail with tinfoil, putting a strip between the portion that grows in and the raw surface caused by it. The tinfoil is fixed by means of a very thin layer of common wax, and the patient told not to wash the part, but to use dry bran for rubbing off the dirt. Of course the toe has to be repeatedly dressed with tinfoil; but, if the operation is carefully performed, it is surprising how long the tinfoil will remain intact, even when the patient is, as was usually the case in Dr. Clemens' hospital practice, very poor and very badly shod. The results are stated to have been most satisfactory, and are ascribed by Dr. Clemens not merely to the mechanical action of the tinfoil, but to the effect of the permanent contact of a combination of metals comprising iron, copper, arsenic, molybdenum, wolfram and bismuth, with a moist and growing portion of flesh. This, he says, brings about in a few weeks the complete healing of the sore, and causes the nail to grow more slowly and in a more healthy manner.—*Lancet.*

PENETRATING WOUNDS OF THE ABDOMEN occupied the whole time of the last seance of the Société de Chirurgie. M. Reclus led off the discussion by remarking that penetrating wounds should be divided into two classes—intestinal perforations affording no certain clinical sign, and perforations of the existence of which no doubt can be entertained. As to the first class, M. Reclus said, that although the fact of perforation might be obscure, he was ready to say that in almost every case of gunshot wound of the abdomen the intestine was wounded. He made thirty-nine experiments on that subject,

and the intestine was wounded thirty-eight times. In the second-class, perforation of the contents of the abdomen was fully demonstrated by the issue of fecal matter through the wound, melena or hematemesis, according to the organ interested. Considering the difficulty, nevertheless, of localizing the lesion, he pronounced himself as a partisan of abstention. M. Terrier said he could not agree with the last speaker as to the consequence for the intestine of abdominal wounds, gunshot or otherwise. Experiments on the dead body could not explain what might happen in the living one, as living tissues are more resisting. Many wounds of the abdomen left the intestine intact, and, on the other hand, whenever he was certain of the existence of a lesion he operated without delay, as he was not one of those who believed much in spontaneous cure. M. Perrier said that some time ago a young man was brought to him for a knife stab in the abdomen. His house surgeon received the patient, and finding a little of the omentum protruding, reduced it and closed hermetically the wound. M. Perrier saw him the following day, and finding that all was going on well, did not interfere. The man left the hospital in ten days apparently well, but a fortnight subsequently he was suddenly attacked in the street by excruciating pain, and in seven hours succumbed. The autopsy revealed two perforations half cicatrized. M. Berger said that it should be admitted that cure sometimes took place under most unfavorable conditions without interference.—*Cor. Med. Press and Circular.*

MISTURA ANTICOLICA.—Each tea-spoonful contains:

Tr. opii,	
Tr. rhei,	
Spts. menth. pip.,	
Spts. camphore,	
Spts. chloroformi,	
Tr. capsici,	aa. 5 min.
Tr. catchu co.,	q.s. ad. 1 dr.

M. Sig. Teaspoonful dose.

APHTHEA (Hirtz):

R—Sodii salicylat,	1½ dr.
Aquaæ distillat,	1 oz.
	M.

Sig.—Apply five or six times daily.

MISTURA EXPECTORANS.—Two tea-spoonfuls contain:

Acid. hydrocyanici dil.,	1 min.
Spts. chloroformi,	5 min.
Acid. hydrobrom (34 per cent.),	7½ min.
Syr. senegae,	15 min.
Syr. scillæ,	13 min.
Syr. prun. Virg., q.s. ad.,	2 dr.

Dose, two teaspoonfuls.

—*St. Louis Courier of Medicine.*

The following are taken from the *International Pocket Medical Formulary*:

IN COLD OR TUBERCULAR ABSCESS.
—(Billroth):

R—Iodoformi,	2 dr.
Glycerinæ,	2½ oz.
	M.

Sig.—Inject the abscess cavity for evacuating the pus:

ANGINA PECTORIS (Richardson):

R—Methylal,	9 dr.
Amyl nitrite,	1 dr.
	M.

Sig.—Drop thirty or forty drops on a handkerchief and inhale. Repeat if necessary.

MISTURA ANTIFEBRILIS.—Each table-spoonful contains:

Morphiæ acetatis,	gr. ¼
Acidi aceti dil.,	5 min.
Tr. aconiti,	1½ to 3 drops
Spts. etheris nitrosi,	
Syrupi limonis,	aa. 1 dr.
Liq. ammon. acetat,	q.s. ad. 4 dr.

M. Dose, a tablespoonful.

ASTHMA (Germain See):

R—Pyridin,	1 dr.
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Sig.—Put on a hot plate in a small room, and send patient to inhale vapor several times.

BRONCHITIS ASSOCIATED WITH VIOLENCE AND PERSISTENT COUGH (Allen):

R—Ergotini,	1½ to 1 oz.
Glycerinæ,	1 oz.
Aquaæ,	3 oz.

M.

Sig.—A teaspoonful at night.

BURNS AND SCALDS (Eller):

R—Cocaini,	10 to 20 gr.
Boroglyceridi,	2 oz.

M.

Sig.—Apply locally on absorbent cotton.

THE fund for promoting the study of tuberculosis, which is being raised in France, amounts now nearly to fifteen thousand dollars.

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ORIGINAL COMMUNICATIONS.

GENERAL SYMPTOMATOLOGY AND DIAGNOSIS OF PARALYSIS.*

F. C. BOURSCHIEDT, M. D., PEORIA, ILL.

Paralysis is the loss of voluntary motion in the muscles of the body controlled by the will. We distinguish between complete loss of motion, "Paralysis," and a mere weakening, "Paresis."

Disease in any portion of the pyramidal tract that leads from the motor portion of the cortical gray matter of the brain to the muscles may lead to paralysis, by taking away its power to conduct voluntary motor irritations.

I will briefly represent the course of this tract. It begins in the region of the central convolutions of the cerebrum and the paracentral lobules, from which the motor fibres in the corona radiata converge and pass downward, after having united into a compact bundle, and enter the internal capsule, which they traverse obliquely, enter the crus and pass into the anterior half of the pons. Here they are somewhat separated, but come together again below and form the anterior pyramids of the medulla. At the lower end of these pyramids the decussation takes place. The motor fibres of each pyramid pass over, for the most part, into the lateral columns of the opposite half

of the cord and form the distinct bundle of the pyramidal tracts. The small part which does not decussate passes down in the anterior column of the cord on the same side. From the lateral tract the fibres pass into the anterior gray matter of the cord. Here they are directly connected with the large motor ganglion cells of the anterior cornua. They pass out from these ganglion cells and become the anterior spinal roots of the peripheral nerves,—and thus the motor impulses coming from the cerebrum reach the voluntary muscles. This is the chief path for the conduction of voluntary innervation. It is possible that there are other motor paths of conduction, but so far we know nothing definitely concerning them.

In order to make a correct diagnosis it is important to pay attention to the course of this motor tract. Since the motor centers for the separate parts of the body are separated and distributed over a large surface of the cerebral cortex, we can explain why affections of the cortex lead to paralysis of only a single part of the body and produce the paralysis known as *monoplegia*. In the internal capsule and crus cerebri,

*Read before the Peoria City Medical Association.

where the fibres have formed into bundles, any disease affecting the motor tract must result in more or less complete paralysis of the entire half of the body, producing the form of paralysis termed *hemiplegia*. I will note here, that owing to the decussation of the pyramids, it develops on the side of the body opposite to the disease in the brain. Further down in the medulla and the cord, where the fibres lie quite near each other, disease has a tendency to affect both halves of the cord, and we will have, in consequence, a paralysis of both sides of the body, the form of paralysis called *paraplegia*. In affections of the peripheral nerves we have again a limitation of paralysis to the region of the affected nerve, a *peripheral* paralysis.

This establishes the fundamental principal that hemiplegia is the chief form of cerebral, and paraplegia of spinal paralysis, whereas monoplegia may be cerebral or peripheral paralysis.

In order to recognize the existence of paralysis, except from the patient's statements, a careful and thorough physical examination of the power of voluntary motion must be made, extending to all portions of the body, but aside from this, other symptoms besides mobility must be noted. The most important of these is the trophic condition of the paralyzed muscle. In comparing paralyzed muscles we see, on the one hand, muscles retain their normal state of nutrition for years, and on the other hand, there is considerable atrophy in a few weeks or months. The last have been classed together under the name of atrophic paralysis. Since

atrophy does not take place in every case, it cannot be simply caused by the inactivity of the muscles, as formerly believed, but must have a special cause. If we represent to ourselves again the whole course of the motor tract, from the cerebral cortex to the voluntary muscles, as mentioned above, we will remember that the nerve fibres, in their whole long course, undergo only one interruption, and that is in the interposition of the large ganglion cells in the anterior cornua of the gray matter of the cord. Clinical and anatomical experience, and recent researches, have taught us that where the break in conduction of the motor fibres lies in the portion between the cortex and the cells in the anterior cornua, there is no atrophy, or only a slight amount, but if disease involves the ganglion cells themselves or the motor tract peripheral to them, a pronounced muscular atrophy develops rapidly. If the cells are intact, the conduction to the muscles is uninterrupted and the muscles, although paralyzed, still retain their normal nutrition, while an affection of the cells destroys the trophic influence which the motor ganglion cells of the anterior cornua exert *per se*, and the muscles atrophy. This atrophy of nerves and muscles is caused by a destruction of tissue. A genuine degeneration of fibres takes place, and we speak of it as degenerative atrophy, in contrast to the simple muscular atrophy which occurs in all severe diseases and in starvation.

This proves the following important points in the anatomical diagnosis of paralysis: In cerebral paralysis there is never a degenerative atrophy of the

muscles paralyzed; in spinal paralysis, only when the ganglion cells are destroyed or injured in their functions atrophy is present; in long continued peripheral paralysis a degenerative atrophy of the paralyzed muscles and nerves must inevitably develop.

There is still another important condition of the paralyzed muscle to be taken in account, but time forbids going into details, and little can be said in a general way, except perhaps that passive motion can be made in some cases without resistance—flaccid paralysis; while in others we meet with considerable resistance, caused frequently by persistent shortening of the muscles themselves or in their antagonists, which prevent the free performance of passive motion—known as plastic paralysis.

Symptoms of motor irritations, convulsions, contractions, tremor, choreic movements, athetosis, spasms, cataleptic rigidity, ataxia, cutaneous reflexes, etc., are all to be taken in consideration, but little can be said in a general way about them, and I will only say a few words on the importance of tendon reflexes. The patellar and Achilles tendon reflexes are practically the most important, and without going into details, will say that the absence of tendon reflexes is characteristic of certain spinal diseases, of peripheral and traumatic paralysis and neuritis. An abnormal increase of the tendon reflexes occurs in that disease of the cord known as spastic spinal paralysis, and in all cerebral paralyses. The increase in these cases is due to the disappearance of certain influences which normally inhibit reflexes.

The most prominent therapeutic aid in the treatment of paralysis and nervous diseases in general is electricity, but it also plays an extremely important part in the examination of nervous patients. The electrical excitability of diseased nerves and muscles gives us the most valuable information in regard to diagnosis and prognosis. I will give the most important ones in as few words as possible. The examination must be complete, with both currents, the secondary faradic and the galvanic. The excitement of the muscle from the nerve is called indirect; the excitement from placing the electrode on the belly of the muscle itself is called direct. In faradic examination the rule is that we can normally provoke marked muscular contractions, both direct and indirect. We designate the strength of the current required by the position of the cylinder between the induction coils at which the first minimal contraction of the muscle occurs.

In galvanic examination we make use of the current reverser, whereby the testing pole can be made either the kathode (negative or zinc pole) or the anode (positive or carbon pole.) It is called the polar method of investigation. The following laws have been established by Brenner, and affirmed by Erb, Ross, Duchenne, Remak, Benedikt, Moritz Meyer, Ziemssen and others, which hold equally for normal motor nerves and the muscles. With a weak current no noticeable excitement takes place; gradually increasing the strength, the first weak contraction of muscle occurs at the closure of the kathode,—that is, when the current is closed, so that the kathode is made the

testing pole. On opening the kathode, or on closing or opening the anode, nothing follows. If we increase the current still more, the cathodic closure contractions become stronger, and the anodic closure and opening contractions appear, while the opening of the kathode has still no effect. Only with a very strong current, in which the KaS contractions have already become tetanic,—that is, when they still persist after the closure of the current,—can we provoke weak KaO contractions.* Expressed in the abbreviations now in general use in electrical diagnosis, the law of contraction for normal muscles and nerves is as follows: Lowest degree, with weak current, KaS, z, KaO, -, AnS, -, AnO, -; middle degree, stronger current, KaS, Z, KaO, -, AnS, z, -, AnO, z; highest degree, with very strong current KaS, Te, KaO, z, AnSZ, AnO, Z. The variations from the normal state seen under pathological conditions, consist of quantitative and qualitative changes in this law of contractions. Quantitative changes, the increased or diminished irritability of nerve and muscle can be easily discovered in unilateral diseases where we can compare the currents required to obtain minimal contractions on the diseased and healthy side, but in bilateral or general disease it is much harder to make out and we must make comparisons with normal individuals or by comparing the excitability of nerve trunks in the different parts of the body with one another. An increase of electrical excitability is found in peripheral paralysis and in tetany, a diminution is

found is bulbar and spinal paralysis, and in progressive muscular atrophy. Much more important, however, are, where also qualitative deviations from the normal law of contraction take place; they are closely connected with the progress of anatomical changes in the paralyzed muscle and nerve, and Erb has given them the name of the "reaction of degeneration." In a few days after the onset of a paralysis the faradic and galvanic excitability of the nerves begins to decline, in a week or two it is completely lost and the strongest currents fail to provoke any trace of muscular contractions from the nerve. As regards the excitability of the muscle direct, we will also notice a gradual diminution with the faradic current, till it is finally lost. With the galvanic current however, it is quite different; here we find first a diminution which soon passes to a decided increase of the galvanic muscular excitability and we can now obtain marked contractions with relatively weak currents. The important peculiarity must here be noted, however, that the muscular contractions are not short and lightning-like as under normal conditions, but are sluggish, worm-like and often persist during the closure of the current. Then the contractions occur not only at the KaS (cathodic closure) as normally, but the AnS (anodic closure) contractions are as KaS, Z. The KaO contractions are also stronger. This reaction of degeneration lasts from four to eight weeks; at the end of this time, in incurable cases, the contractions become weaker, the strength of

*Ka signifies Kathode; An, Anode; S, closure; O, opening; z, weak contraction; Z, stronger contraction; Te, tetanic contraction.

the current necessary to produce them greater, and finally we obtain none at all. In such cases medical skill is useless. In curable cases, however, the contractions become more vigorous and shorter, the KaS contractions again predominate, the faradic muscular and the faradic and galvanic nerve excitability returns, and normal conditions are restored. Besides this complete reaction of degeneration, we have also, in mild cases, a partial reaction of degeneration. In these cases the diminution of the faradic and galvanic excitability in the nerve and the faradic in the muscle is only slight, but the characteristic changes in the direct galvanic excitement of the muscle, as increased excitability, slow contractions and predominance of AnS contractions, are fully developed. In some cases the occurrence of slow contractions on faradic excitement of nerves and muscles has lately been observed—faradic reaction of degeneration.

In order to arrive at the cause producing this symptom of electrical reaction of degeneration, we have to accept, necessarily, the hypothesis of the trophic influence of the ganglion cells in the anterior cornua of the gray matter of the cord over the muscles. In all cases where the disease affects these cells so that trophic influences can no longer be exercised on the muscles we have degenerative atrophy and consequently the electrical reaction of degeneration. In order to understand them well we must look at the anatomical changes necessary to produce them. The first anatomical change is the breaking down of the medullary sheath of the nerves into large and small flakes and

drops, the axis cylinder is soon destroyed and the sheath of schwann finally encloses only homogeneous fluid contents which is rapidly absorbed, then there is an increase of the muscles of the sheath which gradually leads to an increase in the interstitial connective tissue in the nerve. From this we can readily understand the diminution and final loss of electrical excitability in the nerve, which goes hand in hand with the anatomical changes. After these changes in the nerves we can easily see the result on the muscles; they cannot remain unchanged. The muscular fibers must undergo a marked atrophy, the fibers become smaller, the transverse striation is less distinct and fatty or granular degeneration sets in. The muscles thus absorbed now react only to the galvanic current as before mentioned and described. This process of degeneration gradually advances in incurable cases; in those that recover a process of regeneration begins sooner or later and here it is where the judicious use of the galvanic current, aside from tonics and improved nutrition is our best therapeutic aid; it keeps up a healthy tissue change and thus hastens the process of regeneration.

In all cerebral paralysis, however, and those spinal affections where the cause is situated above the anterior cornua concerned, the degenerative atrophy and consequently the reaction of regeneration are entirely wanting. In regard to diagnosis we see thus that the presence of the reaction permits us to decide that the disease is situated in the gray matter of the cord or in the peripheral nerves, certainly an important point gained. As regards prog-

nosis it teaches us that a cure is still very possible, but that it can take place only after a long time, say two to four months. The absence of the reaction tells us with certainty that no coarse anatomical changes are present in the

nerves and we may expect a more rapid recovery, perhaps in three or four weeks. Partial reaction tells us that severe anatomical changes have taken place in the muscle but not in the nerve and permits a favorable prognosis.

THE TREATMENT OF GLYCOSURIA. *

BY CHARLES W. PURDY, M. D., CHICAGO, ILL.

It is customary to consider glycosuria under two forms: First—A milder manifestation of the disease, in which only small amounts of sugar appear in the urine, and these often intermittently; while the general health of the patient suffers little or no disturbance. Second—A more severe type of the disease, characterized by excessively saccharine urine, great thirst, polyuria, emaciation, etc., leading more or less rapidly to extreme marasmus and death. The first form is chiefly of reflex origin, and hence its milder type and rarely fatal termination; while the second form is doubtless of central origin, and consequently more pronounced and serious in its consequences. In a systematic consideration of the management of glycosuria it is important that these two types of the malady be constantly kept in mind.

Physiological chemistry has shown us that glycosuria expresses itself chiefly through disturbance of the glycogenic function of the liver. Claude Bernard extended our knowledge a step farther, and showed that the elemental cause consists of some disturbance of the central nervous system, closely correspond-

ing to the vasor-motor centre. All attempts, however, to unravel the nature of this disturbance have proved thus far entirely futile. It is well to remember, however, that in careful scientific research, failure often teaches us valuable lessons, and, indeed, often furnishes useful information. The very fact that the study of morbid anatomy in glycosuria has failed to reveal uniform and tangible lesions of the central nervous system, goes far to form a presumption that if lesions exist in these cases they can scarcely be sufficiently grave in themselves to cause fatal results. Our present knowledge of the nature and course of glycosuria is quite in harmony with this presumption; for indeed we find the cause of death uniformly to depend upon the perverted function of organs widely apart from the brain. Moreover, if the perverted function of these organs can be corrected and held under control the patient may survive almost indefinitely.

Without entering into the discussion of the many theoretical questions with which, unfortunately, our knowledge of glycosuria is at present so deeply involved, let us more practically inquire:

What facts have we at command upon which to base a rational system of managing the disease? We know that the chief expression of glycosuria is a perverted elaboration of the hydrocarbon foods in the liver, resulting in their conversion into grape sugar. We know that the surcharging of the blood with large quantities of this sugar not only greatly alters the nutritive qualities of the the blood, but it is also liable to induce chemicotoxic changes in that fluid, which are dangerous to life. We know, in short, that the perverted elaboration of so large a proportion of the food supply as that of the hydrocarbonaceous, the saturation of the tissues with the resulting morbid products, and the necessary efforts at their elimination, lead to altered nutrition, emaciation, wasting of the vital forces of the economy, secondary disease of important organs, and to that complex of morbid processes that in glycosuria bring about exhaustion and death. Now, obviously, if we can succeed in cutting off completely the supply of such foods as are prone to faulty elaboration—for the most part hydrocarbons—we shall not only arrest the perverted liver function, but we shall also save the system from the damaging effects of the morbid products poured into it through faulty elaboration of food, and thus practically arrest the regressive changes that lead to such grave results.

If we had to deal only with the purely hydrocarbon foods as the exclusive source of sugar production in the economy, our problem would be a comparatively simple one, since a thoroughly nourishing and sustaining diet can be furnished exclusive of these. But while

the hydrocarbons are the chief, they are not always the only source of sugar production. Experemental investigation has shown that when animals were fed on purely nitrogenous foods— even for lengthy periods of time—a small amount of glycogen continued to be present in their livers. In the most grave forms of diabetes, the “ sugar-forming vice” of the organism becomes so strong that the liver seems capable of splitting up a portion of the nitrogenous foods, and even of the albumenoids of the tissues, and of transforming a part of these into sugar. Fortunately such cases are for the most part long-neglected or advanced ones. Although much may be accomplished even here in retarding the disease, yet it may, as a rule, be considered progressive towards a fatal termination.

The sugar-forming powers of the organism in glucosuria are feeblest in their operation upon nitrogenous materials; indeed, in the early stages of the disease it is probable that these always escape sugar transformation. Next in order come the green parts of certain vegetables, which very strongly resist sugar transformation. The hydrocarbons offer the least resisting power of all foods to sugar transformation, and of this class starch is the most dangerous element.

Practically, then, the more completely we are able to eliminate the hydrocarbons from the food supply in glycosuria, the more completely will we be able to bring and to hold the disease under control. Certain allowances must be made for individual idiosyncrasies, as well as for a few exceptional articles of diet, which experience has shown us are well borne,even when their classification

would seem to contraindicate their use. To speak more accurately, then, the more completely we are able to supply the system with that which it can appropriate as nourishment, and at the same time the more completely we can eliminate that which is convertible into sugar the more successful will be the treatment. Now, in view of the above facts, which I have endeavored to present as carefully separated from theoretical speculations as possible, it seems indeed strange that more earnest efforts are not made in the management of glycosuria—especially in the more pronounced types of the disease—to supply more nearly the diet upon which almost alone depends the improvement or cure of these cases. I shall first point out what seems to me the most prominent errors commonly made in dieting in the severe type of the disease, giving a list of the admissible foods; after which I shall note some of the liberties of diet that may be indulged in the milder reflex forms, and, lastly, I shall refer to the influence of drugs over the disease.

First in importance comes the question of bread, some form of which containing starch is permitted in all the diet lists I have seen. Now I do not hesitate to state, without fear of successful contradiction, that all the so-called diabetic flours, breads and cakes in the market of which I have any knowledge, are loaded with hydrocarbons. They are a "snare and a delusion," and have unquestionably shortened the lives of thousands. Most samples of gluten flour, from which the starch is claimed to have been eliminated—or nearly so—contain from 30 to 40 per cent. of starch. I saw in Dr.

Pavy's laboratory in London a few months since an analysis of one of the so-called diabetic flours on sale in our markets, which showed the starch contents to be nearly 60 per cent. Long before I became aware of these facts I found that I could not control typical cases of diabetes if I permitted the use of commercial flours so-called "diabetic." I need scarcely add that with the above figures before me I have discarded them altogether.

The withdrawal of bread from the diet usually constitutes the most serious deprivation the diabetic patient has to encounter, although the appetite for bread is more largely a matter of taste and habit than of necessity. Some patients become quite reconciled to the change after a few weeks and do not mind it, but usually the craving for bread of some kind remains more or less strong and will not be supplanted by the use of other foods. In the latter class of cases, if strict dieting be demanded, I permit the moderate use of bread made from almond flour as first practiced, I believe, by Dr. Pavy. The almond is absolutely free from starch, but contains about 6 per cent. of sugar. The latter may be eliminated by boiling the meal in acidulated water for an hour or so and then straining it. The almond meal is not on sale in the markets; the large percentage of its contained oil (50 per cent.) renders it unfit for keeping sufficiently long for commercial purposes. In my own practice I direct the meal to be made as required by means of mills especially constructed for the purpose. Almond flour, when beaten up with eggs may be raised with the aid of a little baking powder, and baked in small tins

in an oven, and the resulting bread is relished by most of my patients as equally palatable with ordinary bread. It should be borne in mind that almond bread, as indeed all substitutes for common bread, should be used in moderation; otherwise patients deprived of other luxuries of food fly to the permitted bread with an avidity seemingly born of the thought that it is indeed the "staff of life" instead of merely a substitute therefor. To make a substituted article of diet go farther than the original one is more than is to be expected, even in these practical days, and yet I am led to believe that the failure in accomplishing this in the case of almond bread has led to its unjust condemnation in some of these cases.

The next question of importance in diet—and one upon which authorities greatly differ—is the propriety of the use of milk in diabetes. Dr. Donkin, perhaps the most enthusiastic advocate in its favor, published a book in 1871, which was devoted to the exclusive use of milk as a means of treating this disease. In England Dr. Donkin's so-called "milk cure" has met with few if any weighty supporters; on the contrary, many advocate the total exclusion of milk from the diet. My own experience in the use of milk in the treatment of diabetes began nine years ago, since which time I have made thorough and varied trials of it, both as an exclusive and an adjunct diet. My conclusions are that milk is successful chiefly—perhaps only—in milder forms of the disease, such as I have termed reflex cases. Such cases are, as a rule, controllable by moderate limitations of diet, which offer greater range and nutritive power

than does milk. In the more severe type of the disease I have repeatedly found when the diet was rigidly restricted, save in the use of milk, that a total exclusion of the latter without other change caused a prompt reduction, and often the disappearance of sugar from the urine.

Milk contains a very considerable amount of sugar (lactine), about half an ounce to each pint, and Dr. Pavy observes that this animal hydrocarbon "comports itself in the intestinal canal precisely as does grape sugar." There can be little doubt, therefore, that in the more pronounced type of diabetes requiring a strict diet, milk should be excluded from the list.

There is a form of glycosuria that occurs in obese and over-nourished subjects, in which the amount of sugar in the urine is usually small, and probably due to the ingestion of more hydrocarbons than the system is able to appropriate. Such cases are benefitted, and indeed often cured, by a course of fasting. The "milk cure" consisting of the exclusive use of skimmed milk is likely to benefit such cases because it is, in fact, a system of starving.

Skimmed milk alone is not sufficient to long maintain proper nourishment to the organism. In pronounced diabetes of central origin, where the assimilative powers of the system are weakened, and more or less emaciation has set in, it would, therefore, seem absolute folly to confine the patient to skimmed milk, for under such circumstances death from inanition must be but a question of a short time. Sir Wm. Roberts records three cases which he subjected to the "milk cure" with the result that

they all succumbed in a short time. My own experience is similar to Dr. Roberts', save that I ceased to use it as an exclusive diet after seeing my first patient rapidly sink under its employment. It is important to bear in mind that lactine is confined in the whey, and consequently the other derivatives of milk—as cheese, cream, curds and butter—are unobjectionable.

Another food of animal source contraindicated in diabetis is liver. The liver of animals contains considerable sugar, as might be expected, considering the glycogenic function of that organ. Not only should the liver of quadrupeds be avoided, but certain fish, especially oysters and the interior of crabs and lobsters, since they possess proportionately very large livers. It has been claimed that this precaution is more in keeping with theory than practice, but a sufficient answer is furnished in the fact that analysis of oysters have shown as high a range as 10 per cent. of sugar.

The very large distribution of starch and sugar throughout the vegetable kingdom renders our selection of food from this source limited indeed. In strict dieting we are obliged to avoid nearly the whole list of table vegetables. One class only are we at all safe in drawing upon—greens—and these with caution. Green vegetables fortunately consist mostly of cellulose and contain little, sometimes no starch or sugar. They are rendered still safer if boiled before being eaten, the hot water further insuring the absence of starch and sugar.

The starch and sugar composition of vegetables varies somewhat. This va-

riation depends much upon the degree of cultivation, and the nature of the climate and soil in which they are produced. As a rule, a high degree of domestic cultivation favors an increase of starch and sugar, while high temperature and sunny skies have an opposite tendency. Among the least objectionable vegetables may be mentioned spinach, lettuce, olives, cucumbers, mushrooms, Brussels sprouts, turnip tops, water-cresses, cabbage, cauliflower and the green ends of asparagus. Nearly all nuts are unobjectionable., chestnuts forming an exception.

In the matter of beverages, the diabetic patient will scarcely encounter very serious restrictions, since the range includes most of those in domestic use, including many which fall within the line of luxuries. Among these may be mentioned tea, coffee, all mineral waters, pure spirits, as brandy, whisky, gin and such wines as claret, Rhine wine and Burgundy.

Having briefly reviewed the food products applicable in glycosuria, I shall now enumerate the list I employ in dieting patients upon strict principles, as appropriate in the more severe type of true diabetes of central origin.

STRICT DIABETIC DIET.

Meats of all kinds except livers; beef roasted, broiled, dried, smoked, cured, potted or preserved in any way except with honey, sugar or prohibited vegetables. Mutton, ham, tongue, bacon, sausages. Poultry and game of all kinds. Soups made from meats without flour or prohibited vegetables. Eggs, butter, cheese, pure cream, curds, oil, gelatine and unsweetened jellies. Fish of all kinds except oysters and the inner parts

of crabs and lobsters. Bread, biscuits, and cakes made from almond flour. Spinach, lettuce, olives, cucumbers, mushrooms, water-cresses, green cabbage. Almonds, walnuts, Brazil nuts, filberts, butternuts, cocoanuts. Salt, vinegar and pepper.

Driuks—Tea and coffee, mineral waters, whisky, gin and brandy, in moderation. Claret and Rhine wine.

In mild form of glycosuria some additions may be safely made to the above diet, and often with advantage. Since in such cases the sugar-forming powers of the organism are weaker; or, in other words, the similative powers for sugar and starch are greater, it is only necessary to limit, *not to curtail*, the hydrocarbons. It seems necessary, therefore, to have at hand to draw upon a supplementary list of foods, which contain but limited amounts of these agents. The selection from the supplementary list should always be made with care; indeed, it should be almost as much a matter of experience as rule, since we encounter wide differences in individual cases. Thus levulose—fruit sugar—is often well assimilated in the milder form of the disease, and this permits the inclusion of certain fruits in the supplementary list.

SUPPLEMENTARY DIET.

Cabbage, celery, radishes, cauliflower, green string beans, coldslaw, kraut, young onions, tomatoes, cranberries, apples, if not sweet, milk in moderate quantities, and bran bread or gluten bread well toasted.

The discovery of saccharine has furnished us an admirable substitute for sugar, since this agent possesses a sweetening power nearly 300 times

greater than that of sugar, and a flavor quite as agreeable and pleasant. The tablet form in which saccharine is now put up is very convenient for sweetening coffee, tea and other beverages. Constant use of saccharine in practice for over a year has convinced me that it is entirely harmless in these cases.

The method of dieting diabetic patients is of scarcely less importance than the quality of the diet itself. In order to more accurately determine the effects of diet upon the disease, no so-called specific medicine should be administered until the sugar excretion is reduced as far as is possible by diet alone. Step by step the more objectionable foods should be cut off until we reach almost—indeed in some cases an absolute—animal diet. Of course, where patients have been enjoying all the luxuries of a diet range comprising our modern resources of food-supply and culinary, an abrupt change to a strict diabetic diet would carry with it more or less danger, and therefore such course is never advisable. *The first step* should consist in the exclusion of potatoes, sugar and farinaceous foods, except leaving the patient the liberty of using *a moderate amount* of bread thinly cut and well toasted on both sides. With these restrictions the patient should continue without other changes for about two weeks. In the milder cases this “first step” in dieting will have caused a reduction of the sugar in the urine to relatively small proportions; indeed, in some cases, it completely vanishes. If sugar still appears in the urine—especially if in considerable quantities—under the above restrictions, we may know that the disease is at least of a

moderately severe type, and we should proceed to the next step in the diet. This should consist in the exclusion of milk, and all vegetables save green ones. Greater care should be exercised in the use of bread — white bread should be forbidden, and some substitute employed that contains less starch. Gluten, or bran bread, may be tried, but always toasted, as this alters its contained starch so that it is not readily converted into sugar.

After two weeks' adherence to the above restrictions, if sugar still appears in the urine beyond mere traces, we may be sure that we have to deal with the disease in its more severe type, and we must accordingly bring to bear against it all our resources of diet in the most strict form. Everything containing starch and sugar that can be avoided, should be strictly forbidden. This last step should be entered upon rather more gradually than the others. Milk, if previously permitted, should now be replaced by pure cream. Cabbage, celery, radishes and string beans should be exchanged for spinach, lettuce, water-cresses, olives and cucumbers. Lastly, apples, tomatoes and all fruits should be avoided, and, with the exception of almond bread, some nuts and a few greens, the patient is reduced to an animal diet. Upon these restrictions, properly carried out, we shall find a large proportion of diabetic patients cease to excrete sugar with their urine, and with this result nearly all the symptoms of the disease will disappear.

In exceptional cases, even after a fair trial of the above restrictions, sugar will appear in the urine, but it rarely exceeds 1 per cent. Under such circumstances

the patient should be placed upon an absolutely animal diet, at least for a time. It will be found that a strictly animal diet will often remove these last traces of sugar from the urine, and after its continuance for a longer or shorter time, a reversion to some of the less objectionable articles of the vegetable order causes no reappearance of sugar in the urine.

In accustoming the patient to the more strict form of diet, care should be exercised not to permit the stomach to be overloaded. The beneficial effects of temperate eating in glycosuria were very prominently illustrated during the siege of Paris, as Bouchard observed that sugar entirely disappeared from the urine of diabetics in whom up to that time it had persisted, even though they had been living on a carefully regulated diet. The diminution in the quantity of food, occasioned by its great scarcity during the siege, effected that which alteration in quality had failed to accomplish.

The more slowly food is submitted to the digestive forces, the more completely it is likely to be assimilated. Light meals frequently repeated is the better rule to follow, at least until the patient becomes accustomed to the change. It is important also that the diet be varied as greatly from day to day as the range of food in the list will permit.

I have repeatedly placed diabetic patients that were considerably under 20 years of age upon the strict lines of diet herein indicated, with the result of completely eliminating the sugar from the urine for weeks and months together, and without resort to medication. Thus

it may be seen how much may be expected from proper dieting, even in cases that we are forced to consider as ultimately hopeless ones.

By way of illustration—a year ago a lad of 18 years came to me from a distant state with a history of diabetes of over a year's standing. His symptoms, as is usual in such cases, were great thirst, morbid appetite, polyuria, and advancing emaciation, with a very considerable amount of sugar in his urine. His physician at home had put him upon a diet scarcely so limited as the "first step" laid down in this paper, and but a slight check was put upon the disease. I gradually restricted his food allowance until it conformed to the strict diabetic diet already laid down. His thirst gradually subsided, and at the end of six weeks no trace of sugar was to be found in his urine, and he began to regain his lost weight. Under a continuance of this course the urine remained normal in quantity and free from sugar for about three months, when he returned to his home with directions to follow as closely as possible the course that had so greatly benefitted him. This case may be fairly ranked among the most unpromising ones, chiefly on account of the patient's age, for it is a rare exception to meet with a case under 20 years of age in which the disease does not rapidly prove fatal unless the patient be very strictly dieted.

It may be said of glycosuria in general that its severity is usually in inverse ratio to the age of the patient. The youngest diabetic I have seen came under my eye a short time since, in the person of a little boy three years and two months old. In this case the pol-

yuria was so pronounced that a nurse had to be provided to attend him at night, as he "wet the bed" from six to eight or more times each night. It may be of interest to note that he was put upon an animal diet, including milk, which soon lessened his polyuria so that the patient did not urinate during the whole night. I believe milk is more easily assimilated by children than by adults; at any rate it seems to agree with them better in these cases; and this is very fortunate, since we are almost driven to its use in diabetics of tender age. As a rule, in patients under middle age, we shall be obliged to bring to bear against glycosuria all our resources of dieting in the more strict form. I have met with an exception to this rule in the case of a Jewess, twenty-nine years of age, in whom moderate restrictions of diet have kept the urine practically free from sugar for the past year and a half, only exceptional traces having appeared occasionally. It has been remarked by several observers that diabetes is frequent among Hebrews, and that in them the disease is always of mild form. My own experience tends to confirm the latter statement. I have, indeed, at the present time, three cases in Hebrew women under treatment, and they are all of mild form.

For the most part the milder forms of glycosuria are met with in people that have passed the age of forty or fifty years. In this class of cases our resources against the disease are always more effective; indeed, one or two years' careful dieting not infrequently leads to permanent cure.

It remains to speak of the medical treatment of glycosuria, and I may as

well state frankly at the beginning that I have little faith in the curable power of medication over the disease, while, on the contrary, I am satisfied that the use of drugs in these cases is often productive of harm. My conclusions upon this point have been reached through separating the dietetic from the medical treatment and then comparing the results of each. When a system of diet and medication are employed together from the beginning, the benefits accruing from diet may be attributed to the medicines, while the unfavorable influence of medication may be attributed to the disease. Our faith has become so supreme in the efficiency of medicine in these days, that we are apt both to be misled in its favor, and to overlook its possible injurious effects.

Of the various drugs that have been recommended in glycusuria, opium perhaps maintains its reputation best, and has become the most popular. Opium undoubtedly tends to restrain the excretion of sugar in these cases, but the doses necessary to accomplish this result are so large that the drug is likely to induce constipation and impaired digestion, and thus any good accomplished through its use is more than counterbalanced by resulting evil. I have recently gone over this ground very carefully in a series of trials systematically conducted. Three cases were selected, in each of which the sugar excretion had been reduced by strict diet to about 1 per cent. They were all typical cases of true diabetes of central origin; and no little pains had been expended in reducing the sugar to so small a percentage and maintaining a good general condition with excellent digestion and

assimilation. Under gradually increasing doses of opium the sugar excretion was reduced somewhat in all the cases, but sooner or later constipation, loss of appetite, or nervous disturbances compelled the discontinuance of the drug without exception. This has always been my experience in the use of opium in glycosuria; nor have I found any material advantage in the use of morphia, its bimeconate, or the use of codeine. They all comport themselves much the same as does opium when used in equal physiological doses.

Ergot is probably the next most popular drug employed in the treatment of glycosuria. In the necessarily large doses required to effect the disease, it is unsuitable for lengthy periods of administration. Its controlling power over glycosuria is very feeble and uncertain, and on the whole it may be regarded as unworthy of much confidence.

Bromide of arsenic and syzgium jambolanum have recently been highly lauded in the treatment of glycosuria. I have known the former to be administered in the largest doses (25 drops Gilliford's solution), during which time the patient continued to excrete urine that contained thirty grains of sugar to the ounce. Upon withdrawing the bromide of arsenic and placing the patient upon a restricted diet, I had the satisfaction of seeing the sugar speedily reduced to two and one-half grains to the ounce. I have administered jambul to a number of my patients, but without noticing any favorable change that I could fairly ascribe to its use. A number of other drugs have been more or less highly extolled for their alleged specific influence over glycosuria. Among

these may be mentioned iodoform, bromide of potassium, iodide of potassium, arsenic, sodium phosphate, nitrate of uranium, salicylic acid, piric acid and Calabar bean. There does not, however, appear to be sufficient evidence in favor of any one of these to entitle it to any degree of confidence. Carefully discriminated from the benefits derivable from dieting, these drugs are probably nearly inert so far as their influence over glycosuria is concerned.

The legitimate field of therapeutics in glycosuria becomes practically narrowed down to the treatment of its accompanying symptoms, and upon this point but few words will be here added. It has already been stated that disordered digestion is so frequent in glycosuria as to constitute it an accompanying rule. Indeed, many of the milder cases owe their origin without doubt to this cause. The digestive and assimilative functions should, therefore receive especial support through such agents as experience has taught us prove the most efficient. Among these may be mentioned pepsin and the vegetable bitters—and especially strychnia. The latter I have come to regard with increasing favor.

Constipation, so frequent an accompaniment of glycosuria, should be especially guarded against, as this condition reacts very markedly in enfeebling the digestive and assimilative powers. I have an especial preference for the natural alkaline purgative waters to meet such requirements, since they relieve the over-acid condition of the intestinal canal so common to the disease. Friedrichshall or Sprudel—or the salt made by the evaporation of the latter—

given before breakfast in hot water seem especially appropriate. In middle-aged people inclined to stoutness and overeating, a course of purgation by either of these agents often proves highly beneficial.

The various nervous disturbances accompanying glycosuria are, on the whole, perhaps best met by the use of bromides—especially that of sodium or lithium. It is not uncommon to meet cases of glycosuria complicated by anaemia. When pronounced, this condition is frequently attended by oedema of the extremities, and under such circumstances the liberal use of iron and arsenic is attended by excellent results. The appearance of multiple boils is not uncommon in glycosuric patients; a complication generally considered ominous of approaching danger. I have seen a disappearance of this complication in two weeks under the use of quinine—8 to 10 grains daily—after having resisted other measures for nearly three months.

The most dangerous, and certainly the most rapidly fatal, of all the complications of glycosuria is that of Kussmaul's coma—sometimes called acetonæmia. Since the treatment of this complication has thus far proved so unsatisfactory, a knowledge of the conditions commonly leading thereto should be borne in mind, in order to guard the patient against it. Constipation, mental emotion, and fatigue seem especially to predispose to this complication, while a highly acid state of the urine often precedes it. I have repeatedly in these cases observed sudden death by coma to constitute the penalty of a hunting expedition, or long railway journey entailing unusual fa-

tigue. If the early indications of approaching coma are observed, stimulants and hot baths should be resorted to without delay. It is believed that diabetic coma is brought about by some toxic agent in the blood, perhaps derived from alcoholic fermentation of glucose. Whether this be acetone or some other agent, we are warranted by certain facts in believing that it is of an acid nature, and, therefore, large doses of alkalies seem the most appropriate remedies to employ. An ounce of tartrate or citrate of soda dissolved in a pint of water may be given three or four times a day. The intravenous injection of sodium carbonate, with chloride of sodium, is strongly advised if coma has already become established. Under the latter circumstances, however, recovery is extremely rare under any form of treatment. On the whole, then, promising results are only to be expected by attempts at warding off the attack through such measures as have already suggested.

In concluding what has been intended as a practical review of the management of glycosuria, it seems desirable to emphasize the immense importance of careful dieting as greatly outweighing all our other resources combined. This fact should be strongly impressed upon the patient from the beginning. He should be taught to rely little upon medication, and the most effective means of doing this is to show him how much can be accomplished by careful dieting alone. When he has once learned through experience that the amount of sugar in his urine always been a direct ratio to the prohibited foods indulged in, he is less likely to overstep the proper limits imposed. With his thirst, polyuria, and other discomforts relieved —a sure sequence of careful conformance to the rules—unless he be greatly lacking in intelligence and gratitude, he will cheerfully submit to the conditions imposed, since he will see and feel how greatly he is indebted to them.

CORRESPONDENCE.

BERLIN, Mar. 30, 1889.

T. M. McILVAINE, M. D.:

Dear Doctor—Having failed to keep my promise of calling upon you prior to my departure and obtain some of the information which a residence in Berlin gave you, I have been subjected to all the vexations, annoyances and delays which medical men usually experience when attempting to avail themselves of the advantages here offered them for the study of their profession. Even a thorough acquaintance with the language does not insure

against the loss of several days before you understand the situation.

In the first place, I expected to find a university building in keeping with the teachers. During a stay of several days at Glasgow I took occasion to visit its University, and the massiveness and architectural beauty of the buildings were perfectly bewildering. It is the handsomest and largest university building in the British realm, and in its designs special attention was paid to the medical department. It is just completed, and has, in one portion,

a room for the accommodation of the library and museum bequeathed by the illustrious Hunter, who, despite a more than thirty years' residence in London as its leading surgeon, ever remained true to his *alma mater*, so that the rich art treasures, rare manuscripts and scientific specimens now repose in their elegant quarters here.

Naturally, after seeing a building of such proportions at Glasgow, you picture to yourself a much grander one here in this recognized center of medical instruction, and a sense of disappointment must have come over you, as it did me, upon being shown the large, but dingy and antiquated, structure opposite the Royal Palace and were told that was the far-famed university.

Its surroundings are in themselves all that one could wish for from an educational standpoint. Situated upon that beautiful thoroughfare, Unter den Linden, it is bordered on one side by the National School of Sculpture, on the other by the great Armorial Museum of Frederick the Great; in front, the residence of the Kaiser and the Royal Library, while the shadow of the National Gallery of Art falls almost upon it from the rear. The magnificent statues of the two Humboldts, which guard its portals, are alone sufficient to indicate the nature of the work carried on within. Let the student glance in either direction from its doors and splendid statuary stands before him, either that of Frederick the Great, or those of the famous Field Marshalls, which he caused to be erected, or the statues of mythological characters ornamenting the bridges close by.

Just at present, however, very little of that boisterous hilarity so characteristic of German university life perceptible, for this is the period of the annual Lenten vacation, and the silence within is in keeping with the external gloom of the building. Fortunately, the cause of medical instruction does not suffer on account of this vacation, the opportunities, on the other hand, being much better for practitioners to visit the clinics.

The university building is not much used for the medical department. As in our country, each professor has his own lecture-room, so here each has his own clinic, and instead of climbing or descending a few flights of stairs, as at home, you have here to walk several blocks to hear the different lectures.

During the annual Lenten vacation the "Ferien Curse" are given, something after the order of the Practitioners' Course, held by American colleges. This is by far the most profitable time to be in the city, as a vast amount of work can be crowded into a short time. You can see from catalogue accompanying this that a man can keep just as busy as he chooses. More than three hundred have matriculated for this course under the different professors, a great many matriculants being Americans.

Each professor, aside from his work at the University clinics has a private clinic, where, for a certain time each day, he treats free such cases as come before him.

So anxious are the various professors for an abundance of clinical material that they offer patients every

comfort, and it is said that many of the wealthier ones actually pay a small consideration to those presenting themselves for treatment.

It seems strange that there should be such strife for material, but men study their profession here for the love they bear it, and I know of several professors who devote from five to seven hours daily to clinical work; and that, too, without further reward than that obtained by a better knowledge of their profession.

For the purpose of conducting these clinics they often hire rooms and fit them up with appliances at a considerable expense. Under-graduates are of course glad of the opportunity offered them of becoming assistants at these clinics, so a large number can be disposed of within a very short time.

For obvious reasons there can be no vacation in the matter of clinics, for the transgressions of nature's laws continue constantly, and those paying the penalty seek medical and surgical aid without regard to the time the doctors may have chosen to rest.

The method of instruction in this vacation course is very practical. Practitioners only are allowed to attend and take personal charge of a case or operation. The department of surgery is conducted by Dr. Bramann, who, while only the assistant of the celebrated Prof. Von Bergmann, is well and widely known on account of the successful tracheotomy he performed upon the unfortunate Emperor Frederick last year. In his "clinical lectures" he calls us down into the arena in classes of four and gives the knife into our hands, he merely standing by com-

menting upon the case, and ready to take charge of the operation if necessary. In this manner it fell to the lot of a young graduate from Harvard to amputate a breast, while another removed, at an adjoining table, a large portion of the tibia, for necrosis. Bramann is a splendid operator. You no doubt saw him, but of course he was not then so famous. He is certainly the most promising surgeon in Berlin, and as a rapid operator has no equal. I have seen thirty artery forceps dangling from a wound four minutes after he made the initial incision. He is a tremendous worker—in fact, it seems impossible that a man could accomplish so much without breaking down. I often drop into the surgical policlinic of "Das Königliche Klinikum," where he works from five to seven hours daily, including Sundays. This is by far the largest clinic in Europe, and has grown materially since you knew it.

The patients occupy two large waiting rooms, and are formed in rows and marched into the presence of the surgeons, of whom there are four constantly at work. So great is the attendance some days that at nightfall a number remain unattended and are carried over for the next day. Seventy cases are treated daily, while in the month of March over fourteen hundred new cases were disposed of. As only four or five of us drop into the policlinic, and as Dr. Bramann is particularly courteous to Americans, we have excellent opportunities for observing the methods here employed. I will not take time now to tell you of these methods, save to say that the strictest attention is paid to antiseptic precau-

tions, that an unusually large per cent. of surgical diseases are of tuberculous origin, that the sharp spoon is used in everything of this nature, and that the results obtained are very satisfactory.

While the largest number of surgical cases are treated at the Konigl. Klin., it does not follow that it is the largest hospital, for as you well know, it is quite small when compared to "Die Konigl. Charite"—the largest hospital in Germany. It is nearly two hundred years old and has been constantly added to until now it has over eighteen hundred beds, with a daily average of over sixteen hundred patients. Its staff alone would fill a small hospital, being composed of the director, Geh. Oher.—Med. Generalarzt, Dr. Mehlhausen, with the directors of its thirteen clinics, thirty assistant surgeons, twelve active army surgeons, and twenty-eight under-surgeons. There are four pharmacists, three chaplains, fourteen Bureau officers, eight inspectors and their attendants, over three hundred waiters, as well as servants and officers. Nearly every man famous in the medical history of the last century taught within its walls, and there are names among the present staff whose fame extends throughout the scientific world. Our hospitals at home are in no way inferior to those here, but we have no city of the size of Berlin, consequently, when a man wants to see a large number of rare

and interesting cases in a short time, his most profitable field is here. It is not only the size of the city which renders its hospital instruction so profitable, but the liberty taken with the patients gives much better opportunities for clinical study.

The meetings of the Berlin Medical Society are always of interest, and I frequently avail myself of the pass given me by Prof. Litten to attend them. It is doubtful if a more learned body of men ever meets in counsel. The venerable Virchow occupies the chair, while Prof. Fraenkel fills the post of secretary. Its sessions last only one hour and are always well attended, from five to six hundred being present. The proceedings are published in the *Berliner Klinisch Wochenschrift*, so you no doubt know of the transactions. The vacation course is drawing towards a close and I shall soon leave here for Munich, where I shall spend a while comparing Nussbaum's work to that done here. Munich is rapidly taking the lead of all others in medicine, and I think the attendance is nearly, if not quite, as great as here. I trust that the sluggish Illinois is bringing down its accustomed amount of Chicago sewage and that you are kept busy in consequence. After seeing Rome and Paris, and remaining a month in the London hospitals, I hope to join you in the good work. Fraternally,

GEO. A. ZELLER.

Do not fail to put in a good word for the **MONTHLY** when your friends

inquire with a view to subscribing for a periodical devoted to the profession.

SELECTED ARTICLES.**DIPHTHERIA MALIGNA.**

BY J. R. BRANDT, CHICAGO, ILL.

When I state that in 1881 in Buda Pesth there was an epidemic during which 43,000 persons were attacked, and 19,000 died, nearly 45 per cent., none recovering under fifteen years of age; and that in 1883, in New York city, there were 3,502 cases and 2,000 deaths, or over 59 per cent., we must conclude that the study of this disease alone is of sufficient importance to require and demand the fullest attention of the medical profession, and we should search continually for a prophylactic, or a remedy. It is not my purpose to go into the early history of this disease, but rather to speak of it as we see it in our times.

ETIOLOGY.

Oertel says it exhibits itself under two different series of symptoms, local and general. I beg to transpose the words, and say general and local, as I am satisfied that it is a systemic disease with local manifestations. Various theories are born and nursed tenderly by their parents, and are left by them to be adopted by others, but finally die after a longer or shorter period. The last and most reasonable is the microbic theory, and though the bacillus has not been isolated, yet there are many reasons why it is correct.

Löffler, Gerhart and others have made extensive investigations, yet the test by inoculation has not been satisfactory. The fact that the bichloride, as an adjuvant, materially influences the disease for the better, is in a certain way a proof that it is a micro-organism. Our theory is, that we have here a contagious, infectious, zymotic disease, caused by a microbe, which produces a specific ptomaine, that depurates the blood with great rapidity, until this natural food for the nervous system is

food no longer, but a poison that may and does quickly cause death, and in highly tuberculous subjects predisposed to this disease develops malignancy. This ptomaine poison causes sedation of the nervous system, and sedation of the nerves is first exhibited in their terminal branches, and the large nerves will be affected first, because they receive a larger supply of vitiated blood. The largest nerve that leaves the middle portion of the medulla is the vagus, and its terminal branches supply the heart, stomach and liver, and six branches supply the larynx and pharynx. Now, it is true that in 90 per cent. of all cases there is an exhibition in the throat. It is not uncommon to see this disease ushered in by a disturbance of the digestive organs, and we see heart, lung and stomach failure, and all these parts are supplied by this same vagus nerve. All infectious diseases are caused by a chemical poison, a micro-organism causes the putrefaction, and a ptomaine is produced by this putrefaction.

Putrefying false membrane in the sputum may be carried by flies and deposited on food and thus injected. I saw in Wisconsin a whole litter of puppies infected with this disease by injecting the sputum spat upon the floor by the sick children. I examined the puppies every day, and observed that their mother avoided the sputum, pans containing which were placed where she could eat it if she wished; but she could not be induced to notice it. She seemed to be in good health, and the puppies recovered without treatment. They nursed heartily, and I thought that the mother's milk might not only furnish food, but also antagonize the poison. Acting upon this I

have ever since medicated nursing mothers as well as the nursing child. I have even caused babes that have been weaned to be replaced to the breast, and have medicated wet nurses who were employed to nurse them. Since pursuing this course I have lost only two nursing infants out of 113. There is only one thing of more importance than medical treatment, and that is an early diagnosis. I do not consider it a filth disease in the strictest sense of the word, for I have seen quite as many cases among the extremely clean as the filthy, and had quite as good success treating one as the other, excepting those in places where proper ventilation was wanting. The filthiest people on earth are the Chinese, and they occupy poorly ventilated rooms, and yet they have a peculiar immunity from this disease; none being effected either here or in China. No gas can produce an infectious disease as is claimed by many, as it must be caused by matter of its kind, and must be material not gaseous. We had in the rural districts of this country, and notably in Buda Pesth, the worst form of an epidemic, and there was no gas—none even emanating from putrefaction. It certainly comes from a micro-organism. In Wisconsin, the epidemic was in a region where the sub-soil was sandy, and in Chicago it is worse in the sandy districts. In Wales and England it is found where the sub-soil consists of chalk-beds and limestone, and where drainage is good. I believe it to be more common in filthy districts, but is found and of a malignant type in highland localities. Another cause is decaying vegetable matter.

PTOMAINE.

“ Ptomaine is a putrefactive alkaloid formed during the putrefaction of organic matter.”—*Vaughn*. The discoverer, M. Gautier, says he found albuminoid substances became more strongly alkaline during putrefaction than the

production of ammonia would warrant, and he was thus induced to prosecute researches which led to the discovery of ptomaines. To prove that we are dealing with a ptomanic poison, we must either find the particular ptomaine or prove by comparison, to do which we must give cases of acknowledged ptomanic poisoning, where the ptomaine has been isolated. Dr. Mesic “ reports in cases of sausage poisoning that we see paralysis of the limbs, and muscles of accommodation.” Van Faber, in 1821, observed sixteen cases wherein there was constriction of the throat—tonsils swollen, liquids could be carried as far as the oesophagus, and then were ejected from the mouth and nose by coughing; on the back of the tongue and on the pharynx there was observed a putreform exudate; all had a croupous cough, rough or “goose-skin.” Another case of Dr. Mesic, a “ Mr. Evans was found with subnormal temperature 96° F., pupils dilated, and a rash resembling that of scarlatina, but coarser, covered the chest, forearms and legs below the knee. In another, death was preceded by great restlessness and rolling from one side of the bed to the other.” Muller had six cases dying within twenty-four hours from time of ingestion of the sausage, and I have seen death from scarlatinal infection fully as sudden. Here we see a record of cases which are undoubtedly ptomaine poison, resembling in many features diphtheria infection, that should they occur and during an epidemic of diphtheria, a mistake in diagnosis might easily be made by a hasty observer. You will notice that all except one of these cases had subnormal temperature, and that the treatment by alkalies was not satisfactory. The poison evidently acts on the heart center first, as most ptomanic poisons act.

There is certainly much to be learned regarding ptomainic poison, but what we do know leads me to the belief that

diphtheria and scarlet fever are caused by it. The relationship between diphtheria and scarlet fever is very close, in fact, twin brothers. I have for ten years used nearly the same therapeutics in a general way for them. I have seen scarlet fever infection from diphtheria and diphtheria from scarlatinal infection. The exudate is microscopic ally the same, the fetor the same and the same sequella. I am pleased to see that Dr. A. Jacobi's impressions confirm my belief in this regard. He says in his late article before the British Medical Society: "That there is no microscopic difference between scarlatinal and genuine diphtheria, nor in its other behavior."

DIAGNOSIS.

In speaking of diagnosis, it may seem as though little is required to be said, as the diagnosis is frequently made by the laity before the physician is called, and in epidemics with precision. There is nothing of so great importance to physician or patient as to be able to diagnose early and correctly a disease. The more diagnostic points discovered and proved that we can have, the nearer we come to finding pathognomonic which when found are of incalculable value, next only to a specific remedy for a disease. Preventative medication stands high in the science of medicine, but to diagnosticate by prodromata is the ultima thule in the science of hygiene and medicine. Some eight years ago I thought I had made a discovery of several prodromatic signs in diphtheria. Since then I have gone on making careful investigations, the results of which prove that I was correct in my impressions. At that time I made note of my alleged discoveries and published a short notice in their regard in the *Medical Record*, of which the following is a copy:

"In February, 1881, Dr. J. R. Brandt, of Robinson, Wis., writes: I wish to state for the benefit of the profession that in examining members of families

suffering from diphtheria I have found in several of those not afflicted a notable fall of temperature, from half a degree to a degree and a half, and a noticeable slowness of pulse, irregularity of the heart's action, loss of beat every 3d, 5th, and 7th second, or every 3d, 9th and 14th second, from 12 to 36 hours before there was any other exhibition of the disease, such cases I have found to be malignant."

In April, 1881, I received a letter from Dr. E. L. McKenne, of Viola, Ill. He writes: "On Jan. 26, 1881, I was called to see O. M., aged five years, youngest of five children, sick with diphtheria. I excluded the other children from her room, but twice daily examined them carefully. I noticed nothing abnormal in their condition until the morning of the 31st I found E. M.'s pulse 76 and every seventh or eighth beat absent, tem. in axilla and rectum 97 $\frac{1}{2}$, respiration normal, appetite very good, boy presenting no other evidence of illness. I confess I did not fully understand the import of these symptoms, but I called the attention of parents to these facts and put him under treatment for diphtheria, still excluding from his sister's apartment. Some condition next day; treatment continued for two days longer, when, pulse and temperature being normal, treatment was suspended, it seeming useless to medicate a boy who was apparently well. Four days after suspending treatment the boy had a fever, a diphtheric deposit on tonsils, and on the ninth day from that time, or seventeenth from first abnormal condition noted, he died from exhaustion, the disease making slow but sure progress. I noticed precisely the same condition in Z. M.'s case, the next oldest child, and, receiving the *Medical Record* for January 29th, containing the note of R. Brandt calling the attention of the profession to the symptoms, the first intimation I had (and, I believe, the first on record) of their being a prodromata of diphtheria, I put Z. M. under the same

treatment and continued it without intermission for ten days. All the constitutional symptoms of diphtheria manifested themselves, but there was no local lesion. Now, if the above-named conditions are prodromatic, then the question arises, did I hold the disease in check in E. M.'s case for eight days and aborted in Z. M.'s and could I have had a like happy result in E. M.'s case had the treatment continued? I am very firmly of the opinion that I did hold one in check and checkmated the other." Since the above communication I have found a peculiar palor of tonsils and soft palates amounting to a blanched appearance, and always an initial chill preceding a rise of temperature.

My rule is to carefully examine each member seemingly unaffected, as to temperature, action of heart, pulse and complexion of fauces. I leave a thermometer with a well instructed person with orders to take temperature every hour, night and day, either in groin, axilla, mouth or rectum, and keep a record of same until I come again, always making two or three visits a day, even if I have to neglect other work. Then when I find two out of three of these symptoms exhibited I begin treatment at once. I have since 1886 had 149 cases which exhibited these symptoms, and I have been able to save all but one, which case was tubercular.

SURGICAL THERAPEUTICS.

Caustics, such as argenti nitras or hydrochloric acid fortier are only mentioned to be condemned. Blistering the neck and chest by using any vesicants as counter irritation only give a larger surface for developing an exudate and poisoning the system. Sprays in my hands have not given satisfaction that others claim. I have seen several cases of Broncho-pneumonia induced by the use of the spray. Even an antiseptic spray softens the membrane, and small particles are carried by inhalation into the air vesicles, plugging them and establishing centers for spreading the

disease, and these particles also produce mechanical obstruction and prevent oxidation of the blood. Other particles are swallowed and interfere with digestion. They also may be absorbed and carried into the circulation. The same reasoning is eminently true of inhalants. Irritation when applied to the nasal cavities is of incalculable advantage, as nasal diphtheria is very fatal on account of the large surface attacked and their lymph communication with the rest of the body. (Jacobi.) I take a household syringe and attach it to a soft, hollow bougie, and introduce it into the nasal cavity, horizontally if the patient is sitting, and perpendicularly if lying in the nurse's lap, gently compressing the bulb and turning the bougie so that the stream from it will be applied to different parts with sufficient force to dislodge portions of the membrane and force them out and bathe the surface with antiseptic fluid. I like this better than the rubber open at the end, by using which you may force particles down the throat which should be avoided. I use for this purpose bicloride sol $\frac{1}{500}$, warm, and every 3 or 4 hours, or even every hour for a time, endeavoring to keep an open passage. I use at one time from 4 to 6 ounces in each cavity; nothing will reduce adenites as irrigation. Gargles have never in my hands been of any advantage and I gave them up long ago.

TRACHEOTOMY.

I have never seen a patient recover on whom tracheotomy had been performed after crepitant and subcrepitant rales have developed at the base of the lungs. If not allowed to operate before this condition arises I decline to operate, for we only prolong the suffering of the patient. I believe tracheotomy should be prophylactic, the same as in immediate therapeutics. Throw the responsibility on the relatives and friends, and give a very guarded prognosis, even when the operation is done early. As to intubation, much is now being said

in its favor, and in feeble and young patients it is giving satisfaction, but in malignant cases, such as this article refers to, I prefer tracheotomy. In intubation portions of false membrane may be forced down the trachea, or the tube come in contact with the membrane and hold it in situ, where it will be absorbed; the tube by pressure, may cut off circulation at that point and increase the putrefying surface. Should the tube become plugged from below, there is danger of suffocation before an expert might be obtained to remove it, as in tracheotomy an expert can remove the canula at once.

In cases (as Dr. Parker, of London, has pointed out) where the dry epiglottic folds have become tumefied, it is impossible to introduce the tube. Admitting this to be awkwardness, only shows that time and practice will have to be taken to make one an expert, for expertness is most certainly required to make this procedure a success.

Dr. Waxham has reported 160 cases with 44 recoveries, making 28 per cent. of recoveries. Of 1,072 tracheotomies performed in various parts of the United States, there have been 287 recoveries, or 27 per cent., which look favorable for tubage, but I think before giving statistics we must have more intubation. I believe the better way would be to intubate in non-malignants, and to perform tracheotomy in malignants, always intubate early or not at all.

MEDICAL THERAPEUTICS AND HYGIENE.

In treatment of diphtheria, there are several hygienic rules I strictly enforce: First, sequestration if it can possibly be done. In farming districts I utilize the barns, smoke houses and granaries, in winter; in summer and fall I improvise tents. I give them earthen floors if possible; I never allow the wooden floors to be washed, but have them sprinkled with a Bichloride solution every six hours, $\frac{1}{100}$, plenty of fresh air constantly passing through the rooms, the drinkable water always boiled and

afterward cooled by surrounding it with ice in vessels. Milk I order boiled and treated in the same way. I never allow the patient to take one step under any circumstances, they must always be carried or handled in such a way that they will make no exertion. I make from three to six visits each day, personally and carefully examining their throats, using a head mirror at night and always wearing glasses to protect my eyes. With malignants I have remained for seventy-two consecutive hours. I will not leave a case until some suitable person can be obtained and whom I have personally instructed. During the epidemic in Wisconsin, which lasted from 1876 to 1880, I used every remedy which gave any reason for success mentioned in the current medical literature of the day, and I have found much more to condemn than approve; so many were worse than worthless that I give only those which have proved to be of the most value in my hands, and the manner of using them. I advise general and local treatment, as I consider it a systemic disease with local manifestations. The use of alkalines was very unsatisfactory, but the reason is patent when we reflect that putrefactive changes take place with great rapidity in alkaline albumenoids, and less when there is an acid. Acid retards putrefactive changes, and so does alcohol, and herein lies the reasons for rational treatment. In malignant cases I give acids to antagonize the changes going on and producing ptomaines; I give alcoholic stimulants, which also retard putrefaction and degeneration, and give food—best milk, or milk and coffee, cream and coffee—anoint with cream and whisky the whole body every six hours. Give rectal injection of the most easily digested foods to make new blood to supply the economy, which is below par. The ptomaine may be eliminated or oxidized. Hydrogen sulphur, I am satisfied, will eliminate the poison, and has given satisfaction in

my hands. The respiration of oxygen is worthy of trial where it can be done, and I have been pleased with its effects, it acts both as a destroyer the ptomaines and retards putrefaction. I use Tr. Ferri and the Bichlor. Hydrarg. after the following formula for an adult:

Tr. Ferri Chlo.	4	drams
Bichlo Hydrarg	1	grain
Syr Simplex to	4	ounces

Sig: One teaspoonful every two hours.

Alternate with—

Hydrochloric Acid dil	4	drams
Com. Tr. Cinch	1½	ounces
Syr. Sim. to	4	ounces

Sig: Teaspoonful every two hours.

In a few moments after each I give whiskey mixed with water and sugar from 1 to 3 teaspoonsfuls, in a moment after I give $\frac{1}{4}$ of a teacupful of milk that has been boiled and cooled in ice. I am satisfied that the Hydrochloric Acid is that which does the satisfactory work when we use the Tr. Ferri. This treatment I continue for from 24 to 72 hours depending upon the gravity of the case, when I give a little more time *i. e.* one hour and a half for 24 or 36 hours, and if all is doing well I then alternate every two hours until recovery. When I find an exudate on the tonsils I touch it with a solution of Sub. Sulphate Ferri, one-half, and Bichlor Hydrarg, one-half, 1 to 250 using a camels hair brush; applying this preparation every two hours just previous to administering the Ferri Mixture; immediately I remove all the shreds of membrane I can, even using desecting forceps for the purpose, then on this surface I again apply the above antiseptic solution. I have greater dread of the superimposed layers of Scarlatina and diphtheria—malig. gal 3 putrefying membrane being absorbed and completely saturating the system, and producing more ptomaines, than I have of doing harm by more or less irritating these parts. All agree that the removal of the putrefying membrane from the nasal cavities by irrigation is good treatment, if good for one

why not for another part? In malignant cases that do recover the patient should not be allowed to leave their bed for three or four weeks and watched carefully for heart failure. Malignant diphtheria in tuberculous subjects is nearly always fatal. Malignants develop mild forms in others and the converse. These deductions I have derived from, and after having treated and recorded in the last twelve years, 2,600 cases.

PRECAUTIONS.

There are certain precautions necessary to be taken by the physician, and first I deem it criminal for a physician to attend cases of confinement while in attendance upon either scarletina, diphtheria or erysipelas. As I have found dogs and rabbits infected with diphtheria, I think all pets should be removed from the house at once, as the more pets the more sources of infection. In all cases of nursing infants to medicate the mother is to save the child, that is, if the child will take the breast, and they will take the breast in most cases where they will refuse everything else. Powders have not been satisfactory except when applied to the exudate found on the genitalia of females, and here calomel and tannic acid has been of great benefit. Pilocarpine has been followed by such extreme exhaustion that I deem it too hazardous to risk. In heart failure I depend upon alcoholic stimulants and rest, not allowing the patient to make any exertion whatever. Digitalis is so poorly borne by the stomach that I give it per rectum or hypodermically; I never use digitaline. Camphor and carbolic acid in equal parts applied to the exudate was not as satisfactory as sub. sulph. of Iron and Bichloride of Hyd. I have shortened the course of many cases by giving one full dose of calomel at the time of my first visit.

POINTS OF INTEREST.

First: That it is a systemic disease with local manifestations.

Second: That there are ever prodromata, consisting of sub-normal temperature, heart failure and irregularity of its action, an occasional loss of an impulse. Blanched appearance of the fauces, soft palate and uvula, and a chill previous to a rise of temperature, all occurring from 12 to 72 hours before an exudate is exhibited. Thus warranting therapeutics at once.

Third: That diphtheria and scarletinal poison are the same, and of ptomainic origin, and that it causes sedac-

tion of the vagus, putrefactive changes, and ulceration at the terminal fibrills of the nerves sedated.

Fourth: That in treating this disease we must antagonize the poison by elimination and neutralization. Eliminate with Bichloride. Neutralize with Bichloride and Hydrochloric Acid. Stimulate with alcoholics to the fullest.

Fifth: Manufacture new blood as rapidly as possible, by giving by mouth, rectum or inunction, or all combined, nourishing food.

THERAPEUTICS OF ECZEMA. — Dr. Veiel, of Canstatt, says in the *Medical Correspondence-Blatt d. wurr. arztl. Landesver.*, that in acute eczema internal treatment is not indicated, while in chronic, widely distributed eczema arsenic is to be used simultaneously with external treatment. If chlorosis is present, iron should be administered half an hour before meals and arsenic one hour after meals. Cod liver oil and regulation of the diet are very important in scrofulous eczema. For the itching of eczema he uses chloral and bromide of potash internally.

The stage of the affection is of importance as regards treatment. In acute eczema all irritants are to be avoided. Where, as in children, baths are not entirely to be avoided, some muciligenous substance should be added to them. All soaps are to be avoided. To diminish the burning and itching in acute, but not moist, eczema, Veiel recommends Unna's zinc paste:

R. Oxide of zinc

Gelatin	aa 4	drams.
Glycerine	6½	drams
Distilled water	1½	ounces

To be warmed in a water bath and applied with a bristle pencil.

After several days it is to be washed away with lukewarm water. In moist eczema the affected places are washed once daily, and then the paste is again applied. If this proves effective, Veiel

employs starch cushions, which remain cool and are often changed. If in universal eczema the paste is not borne, starch is applied in powder, with which, if there is much itching, two per cent. of camphor is mixed. If this is of no service, the parts are washed with borax, or acetate of alumina, with some glycerine:

R. Liquoris alum. acet.	150	minims
Aqua destil.	3	ounces

M.

In chronic eczema the crusts and scales are first loosened with soft soap, baths, or oil. The healing of the moist places is brought about as before. The addition of one or two per cent. of ichthyol is very serviceable. If the eczema still continues scaly, Lassar's paste is indicated, or tar with alcohol:

R. Picis liquidi	15	minims
Alcoholis	45	minims

or tar may be added in the strength of one or two per cent. to the salve above mentioned. The employment of the latter on the hairy parts of the face and pubes is contraindicated, as in these places inflammations resembling sycosis are easily developed. If the eczema does not yield to the tar, pyrogallic acid and chrysarobin (in an ointment of from two to ten per cent. strength) is at times attended with success. — *Weiner Med. Presse*, Feb. 3, 1889.

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EDITORIAL.

REPORT OF THE COMMITTEE ON REVISION OF THE CONSTITUTION OF THE ILLINOIS STATE MEDICAL SOCIETY.

The following points embrace the changes in the constitution of the Illinois State Medical Society, which will be reported to that society at its next meeting, May 21st, at Jacksonville, by the committee appointed last year for that purpose:

1st, *Membership*.—Any regular reputable physician practicing in the state may become a member of this society, either by being chosen as delegate from a local society, or upon presenting a certificate of good character and reputable practice, signed by the president and secretary of any local society in affiliation with this society, and the payment of the regular fees. Such persons as become members by certificate shall have all privileges excepting the right to vote.

2d, *Place of Meeting*.—This society shall hold every alternate meeting in the city of Springfield on the year corresponding with the meeting of the State Legislature. The place of meet-

ing for the other year to be decided by the vote of the society.

3d.—The time of meeting shall be the first Tuesday in May of each year.

4th, *Transactions*.—The society shall adopt some medical journal published in this state as the organ of the society, and all papers read shall be published therein as soon as possible after the meeting. The first issue of said journal following each meeting shall contain the business transactions of said meeting. The society shall not be responsible for the printing of anything further than its own transactions and papers read, nor for the view maintained in such papers.

5th.—The executive committee shall select and secure the delivery of an annual address by some man of wide reputation upon some medical or surgical topic. Such address shall be the property of the society. The society shall make suitable compensation to the person chosen to deliver said address.

6th.—The scientific work of each meeting shall be divided into three sections, as follows: 1. Practice of medicine, *materia medica* and therapeutics. 2. Surgery, ophthalmology and otology, dermatology and venereal diseases. 3. Obstetrics, gynecology and diseases of children. All papers prepared shall be referred to its appropriate section. Chairmen of sections only shall be chosen by the society, and to the chairmen so chosen shall be given charge of the programme to be presented, in their respective sections.

7th.—An entertainment fund shall be provided by the setting apart for that purpose the sum of one dollar from the annual dues of each member. The disposal of this entertainment fund is to be placed in the hands of the entertainment committee, composed of the president, secretary, local secretary, and three permanent members resident in the city where the meeting is to be held.

The arguments in favor of the changes proposed will be offered when the report is placed before the society, but a short outline of them will not be out of place here.

As regards membership, upon which largely depends the life and usefulness of the society and its work, a strong effort must be made in the near future to bring into the society a much larger number of active working men from every part of the state. In many counties, local societies are not organized, hence there is no way for resident physicians to become members of the state society. The proposed change, which is similar to one made a couple of years ago in the by-laws of the American

Medical Association, will permit of these men belonging to the state organization, and through them, when their interest in society work is once aroused, local societies can be organized.

In this connection it might be well to revert to the growth of large district societies throughout the state, which have seemed to interfere with the state society. Some plan can doubtless be arranged by which these societies can be made district branches of the state society. Their spring meetings can be done away with and fall meetings held in their respective districts, which will really be branch meetings of the larger body. Again, by a closer affiliation with the state society, a greater incentive to good, original work can be given by such branches choosing their best workers to prepare papers for the spring meeting of the larger society. In many ways would a closer union of these district societies with the state organization be of infinite benefit to both.

As regards place of meeting, Springfield has been considered by a majority of the committee as the best place of meeting at least once in two years, and for several reasons: It is the state capital and as the meetings there will correspond with the meetings of the state legislature, a greater influence can be brought to bear upon that body looking towards the enactment of laws in which the profession are directly interested. Again, Springfield is quite a railroad centre, and is easily accessible from all parts of the state, especially from the southern part, in which the society has been steadily losing ground for a number of years past. Then, too, being the seat of the state government, it will

naturally attract to the meetings held there quite a number from a desire to visit the state capital. No effort must be spared to increase our membership, and to this end everything that will aid in doing this must be done.

As regards journalizing the transactions: This has proven eminently satisfactory in enlarging the paying membership of the American Medical Association, and, it is thought, will have the same effect in this state. A live journal, devoted to the interests of the medical profession of Illinois, and published under the partial direction at least of the state society, will reach a much larger proportion of the 7,000 or 8,000 physicians in this state than do the transactions as now published, and thus will have a much greater influence in arousing an interest in state society work. Other points might be raised in favor of publishing this method of transactions, but the one above given is the most potent.

As regards an annual address by some eminent member of the profession outside of our own state, the reason for suggesting this is two-fold: One reason is that a name of national repute will incite a curiosity on the part of many to see and hear one whose name they are so well acquainted with and whose writings or teachings they daily use in their practice. A second reason is to excite a spirit of emulation on the part of all

members to equal, if possible, the productions of eminent men, and to stimulate original research. Again, the fact being known that a man like Godell, or Da Costa, or Loomis, or Ashurst, or Osler, or any one of a hundred others who might be mentioned, is engaged in preparing an address for our state society, the attention of the whole medical world would be attracted to it, and our state society would not be the loser by any means.

As regards the entertainment fund: Since the society will probably be limited to half a dozen places of meeting, the necessity of paying for its own entertainment is at once evident.

As regards the time of meeting, it has been thought best to make it two weeks earlier, as being less liable to conflict with the meeting of the National Association.

A large increase in attendance and membership being expected, the division of the work into sections has been deemed desirable by a majority of the committee. This will give more time for the discussion of papers, and will bring out a better class of papers. The selection of a chairman only for each section is a good suggestion.

This, we believe, covers the points taken up by the committee, and, as an earnest effort of the committee for the very best interests of the society, is respectfully submitted to its members.

RAILROAD REDUCTION.

The following railroads will carry members and delegates to the Illinois State Medical Society at Jacksonville,

on payment of one fare going and one-third fare returning:

Chicago & Alton Railway.

Chicago & North Western Railway.
Chicago, Burlington & Northern.
Chicago, Burlington & Quincy.
Chicago, Milwaukee & St. Paul.
Chicago, Rock Island & Pacific.
Chicago, St. Paul & Kansas.
Chicago, Santa Fe & California.
Illinois Central.
Rock Island & Peoria.

Wisconsin Central lines.
Wabash.
Jacksonville Southeastern.
The local secretary will sign certificates of membership at the time of meeting.

T. M. CULLIMORE, M. D.,
Jacksonville, Ill.

BOOK NOTICES.

A REFERENCE HAND-BOOK OF THE MEDICAL SCIENCES—Embracing the entire range of Scientific and Practical Medicine and the Allied Sciences. By various writers. Illustrated by chromolithographs and fine wood engravings. Edited by ALBERT H. BUCK, M. D. Vol. VII. 795 pages. \$6, \$7 and \$8 per volume. New York: William Wood & Co.

This is the seventh volume of this great work, the preceding six volumes of which have been previously noticed in the *MONTHLY*. The volume opens with an interesting chapter of 27 pp. on teratology, by Dr. Geo. Jackson Fisher, containing the history, classification and causes of abnormal embryology or congenital malformations, copiously illustrated with wood engravings. The article on tuberculosis, forty-two pp., by Dr. Herman M. Briggs, will be read with great interest. He divides the history of tuberculosis into five periods: 1. The period of ancient history, during which it was only observed from a clinical standpoint, and was regarded as an ulceration or suppuration of the lungs. 2. The birth of anatomy in the 16th century, which furnished the first definite knowledge regarding changes or

lesions of structure. 3. The discoveries of Bayle and Lænnec, in the early part of the present century; that tuberculosis was a separate affection, due to the deposit of tubercle, a specific product independent of ordinary inflammation. 4. The discovery by Villemin, in 1865, that tuberculosis was an inoculable disease. 5. The discovery by Koch, in 1882, that tuberculosis was caused by a specific micro-organism—the bacillus tuberculosis. The article is illustrated with colored plates of the tubercular bacillus. The articles on the Urine, thirty-seven pages, by Dr. R. F. Ruttan; on Uterine Displacements, by Dr. J. W. Elliott; on Congenital Malformations of the Uterus, by Dr. Geo. W. Johnson; on Diseases and Injuries of the Cervix Uteri and Endometritis, by Dr. Chas. P. Strong; Inversion of the Uterus, by Dr. F. W. Johnson; Varicocele, by Dr. P. S. Connor; Water, by Dr. Chas. Smart, and the Tonsils, by Dr. Bryson Delavan, are among many others exceedingly interesting and instructive.

Altogether eighty-one different authors contributed to the volume. There is yet one more volume to follow to complete the series, and the physician who is so fortunate as to secure the work

will have a library of reference superior to anything that has been published heretofore.

ATLAS OF VENEREAL AND SKIN DISEASES.—Comprising Original Illustrations and Selections from the Plates of Kaposi, Hutchinson, Neumann, Fournier and Hardy, Ricord, Cullerrier, Besnier, Vidal, Leloir, Morrow, Keys, Robinson, Hyde, Piffard, and others. A. MORROW, A. M., M. D., Clinical Professor of Venereal Diseases, Formerly Clinical Lecturer on Dermatology in the University of the City of New York, Surgeon to Charity Hospital, Etc. *Fasciculæ X., XI., XII.* New York: William Wood & Co. Price, \$2 per part.

This valuable work grows in interest as each part makes its appearance. We now have before us *Fasciculus X.*, containing besides the valuable text, the following full-page plates, in colors: Plate 46—Eczema of Palm, Psoriasis of Palm, Eczema Rubrum. Plate 47—Eczema Seborrhoicum; Dry, Scaly and Moist forms. Plate 48—Impetigo Fiquata, Impetigo Contagiosa. Plate 49—Dermatitis Exfoliativa, Pityriasis Rubra. Plate 50—Dermatitis Medicamentosa. Eruptions from Iodide and Bromide Potassium. *Fasciculus XI.* contains: Plate 51—Herpes Zoster, Herpes Febrilis, Herpes Progenitalis. Plate 52—Herpes Zoster. Plate 53—Dermatitis Herpetiformis. Plate 54—Pemphigus Vulgaris; Pemphigus Foliaceus. Plate 55—Purpura Simplex; Purpura Thrombotica. *Fasciculus XII.* contains: Plate 56—Psoriasis of Body, Psoriasis of Hand and Arm. Plate 57—Lichen Planus. Plate 58—Lichen Ruber, Lichen Ruber Moniliformis. Plate 59—Acne Vulgaris, Acne Rosacea. Plate 60—Molluscum Epitheliale, Verruca Senilis. The great

value of these plates in the matter of diagnosis lies in their accuracy, and when you have made the correct diagnosis, the latest and most successful treatment is incorporated. You will do well to give this serious thought.

EXPLORATION OF THE CHEST IN HEALTH AND DISEASE, BY STEPHEN SMITH BURT, M. D., Professor of Clinical Medicine and Physical Diagnosis in the New York Post-Graduate Medical School and Hospital; Physician to the Out-Door Department (Diseases of the Heart and Lungs) Bellevue Hospital. Twelve mo., cloth, pp. 206. D. Appleton & Co., Publishers, 1, 3 and 5 Bond street, New York, 1889.

A most excellent little monograph that will prove of incalculable value to students and practitioners of medicine. Well written, handsomely printed, and excellently illustrated by clear and instructive engravings. The author has well utilized his own personal experience, and has drawn freely on the established stock of knowledge in regard to the physical signs of morbid phenomena of disease of the thoracic viscera.

ELECTRICITY IN THE DISEASES OF WOMEN, With Special Reference to the Application of Strong Currents. By G. BETTON MASSEY, M. D., Physician to the Nervous Department of Howard Hospital; late Electro-therapeutist to the Philadelphia Orthopedic Hospital and Infirmary for Nervous Diseases, etc. F. A. Davis, Publisher, Philadelphia and London. 1889. 12 mo.; pp. 210; price, \$1.50.

The author believes this to be the first attempt at a complete treatise on electrical treatment of diseases of women. The writings of Apostoli, Englemann, Smith and others are utilized, though much of the book is a presenta-

tion of the author's own experience. The laws of electricity are explained in a practical manner, and those interested in these therapeutical uses of electricity will do well to procure a copy of the work.

Wood's MEDICAL AND SURGICAL MONOGRAPHS. Vol. No. 3, March, 1889. New York: Wm. Wood & Co.

This series of monographs is issued in monthly parts at \$1 each, or \$10 for the year. The March number contains the following papers: Neurasthenia and its Treatment, by Dr. H. Von Ziemssen. Antipyresis and Antipyretic Methods of Treatment, by Dr. H. Von Ziemssen. The Tongue as an indication of Disease, by Dr. W. H. Dickinson. On the Treatment of Cystic Goitre, by T. M. Hovell, F. R. C. S. New Remedies from 1878 to 1888, by Dr. C. Cauquil. These papers are all bound in leatherette under one cover, and are first-class as well as cheap.

HAND-BOOK OF MATERIA MEDICA, PHARMACY AND THERAPEUTICS. Compiled for the use of Students Preparing for Examination. By CUTHBERT BOWEN M. D., B. A., Philadelphia: F. A. Davis. Cloth, 12 mo., pp. 366, 1888.

This valuable little book is arranged in the form of questions and replies, and the student had better get it before his examination, lest he be obliged to extract from the ceiling the answer he is supposed to have on the tip of his

tongue. The work is well printed and contains a large number of prescriptions.

THE PSYCHIC LIFE OF MICRO-ORGANISMS. A study in Experimental Psychology. By ALFRED BINET. Translated from the French by Thomas McCormack, with a preface by the author written especially for the American edition. Chicago, 1889. The Open Court Publishing Company. Cloth, 75 cents. Paper, 50 cents.

M. Alfred Binet, the collaborator of Ribot and Fere, and one of the most eminent representatives of the French School of Psychology, has presented in the above work the most important results of recent investigations into the world of Micro-Organisms. The subject is a branch of comparative psychology little known, as the data of this department of natural science lie scattered for the most part in isolated reports and publications, and no attempt has hitherto been made to collate and present them in a systematized form.

Especial use has been made of the investigations of Balbiani, Claparede and Lachmann, Maupas, Ribot, Engle-mann, Pouchet, Weber, Pfeffer, Kent, Dujardin, Gruber, Nussbaum, Butschli, Lieberkuhn. The cuts, eighteen in number, are illustrative of the movements, nutrition, digestion, nuclear phenomena and fecundation of Proto-Organisms.

The most interesting chapters are those on fecundation, which demonstrate the same instincts and vital powers to exist in spermatozoids as are found in animals of a higher organization.

PERISCOPE.

THE INDICATIONS FOR THE USE OF THE BROMIDES.—This subject was recently discussed in the Detroit Academy of Medicine (*American Lancet*), Dr. J. E. Emmerson reading a paper which referred to the initial craze which attended the introduction of the bromides into general therapeutics more than twenty years ago. The profession is now learning to limit the field of their utility to those morbid conditions in which a cerebral or spinal sedative is desired; or, more broadly, to cases in which a sedative of the nervous system is required, including the sympathetic as well as the cerebro-spinal nervous system. He believes it is doubtful if beyond this field the bromides have any legitimate therapeutic use. That the bromides have proved to be an invaluable addition to our *materia medica* cannot be questioned, but he thinks there is good reason to believe that the evils flowing from their indiscriminate and routine administration almost counterbalance the benefits they have conferred.

It would seem sometimes to be forgotten that bromides are rarely, if ever, *directly curative*, and that in a very large proportion of cases in which they are palliative of some of the symptoms, they are by their physiological action antagonistic to reparative processes, if given continuously in doses for any length of time.

The advantage gained by quieting nervous excitement is often offset by the fact that we thereby obscure our view of the case and lose sight of underlying causes of the nervous perturbation. We may thus keep our patient in a continuous state of bromicidal depression, and retard recovery, not alone by the disastrous effects the drug may have on tissue repair, but also by obscuring our knowledge of the patient's true condition.

There are two prominent reasons why the physician is led to prescribe the bromides in the manner above men-

tioned: First, because in many cases the obtrusive symptoms of the disease are gratefully modified and the friends of the patient are thus relieved of their undue alarm, while the physician's own mind is to a degree also relieved of anxiety; secondly, because he has no definite conception of the nature of the disease and consequently no definite purpose in his prescription beyond the immediate relief of alarming symptoms. He hopes that nature may come to his aid and cure the patient if he can only gain time. This is all very well and rational as far as it goes (for the most experienced and wisest physician is doubtless often at a loss for a diagnosis), provided nature herself is not thwarted in her kindly efforts to cure the patient. The point which he would impress is that the bromides are not a panacea for all nervous disorders, which may be prescribed at will with no fear to the patient.

Think twice before administering the bromides, especially if you have any doubt as to the nature of the pathological conditions causing the nervous disturbance. Remember that the bromides act powerfully on the vaso-motor nerves and diminish the blood supply to the capillary vessels of the brain and cord, and possibly of the muscles and cutaneous tissues. Ask yourself the question, whether you wish to diminish the functional activity of the brain and cord by diminishing their blood supply, or whether the over-activity you wish to allay may not be due to a diminution of vaso-motor control, which other remedies will better correct.—*Practice.*

IN the case of a woman who had passed *gall stones*, Prof. Bartholow directed $\frac{1}{10}$ grain arseniate of sodium *ter die*, and—

R. Sodii phosphat.,
Sodii sulph., aa $\frac{1}{2}$ drachm
M. Sig.—*Ter die* in hot water.

DIABETES AND TUMORS—Dr. Tuffier has recently published a monograph on this somewhat important subject in the *Archives Generales de medicina*. The coincidence of diabetes and neoplasms, only noted hitherto in a few scattered publications, and entirely overlooked in standard text-books, does not appear rare. This coincidence is not surprising to the author. He accepts M. Verneuil's bold theory that both tumors and diabetes are related to the arthritic diathesis. Already almost every form of tumor has been observed in diabetic patients. Almost every form of diabetes has been found to attack persons already the subjects of tumor. As a rule, the constitutional disease comes first; the patient is diabetic already before the tumor makes its appearance. Malignant tumors, as a rule, advance without causing much pain, and somewhat slowly in these cases, but they proceed more rapidly than the diabetic symptoms. They are apt to be taken for innocent growths. The complication in question is very serious in respect to operative interference, as we all know. No surgeon should think of removing small, innocent tumors which are causing no trouble. Dr. Tuffier describes two instructive cases. In the first, death occurred forty hours after the removal of a small parotid tumor. The fact that the patient was diabetic had been overlooked. This was also the case in the second example of the dangers of operation under the circumstances. "A little hypertrophic tumor of the skin of the cheek" was removed at the patient's request. Phlegmonous erysipelas, followed by sloughing, set in and killed the patient within five days. Urgent operations must, Dr. Tuffier asserts, be undertaken with great caution. The safer are preferable to the most thorough, in his opinion. When an operation appears absolutely necessary, but not urgent, it is important to spend some time in reducing the diabetic symptoms by medical treatment. Should, however,

all the sugar and polyuria disappear, the surgeon must still never overlook the nature of the patient's diathesis. Under the most favorable circumstances, in any case of that kind, deep operations and prolonged dissections, free division of vessels, and the formation of large flaps are to be avoided. The slow progress of tumors and the little pain which they produce are important facts, according to Dr. Tuffier. He has found that malignant tumors lie almost latent in diabetic subjects for a long period. Removal of a similar growth from a healthy subject would hardly insure him against so long an interval of time before recurrence. When an operation is thought advisable, the thermo-cautery is preferable to the knife. No attempt to insure union by first intention should be made if it involves the slightest traction on skin flaps. The wound must be laid open, but dressed with extreme antiseptic precautions.—*British Medical Journal*, Feb. 16, 1889.

Poisoning with SULPHOCYANIDE OF MERCURY.—A patient was recently poisoned in Paris in a way that for a time remained undiscovered. The *Chemist and Druggist*, Feb. 14, gives the following explanation of it: A sergeant attached to the hospital, and chemically inclined, undertook one day to prepare Pharo's serpents' eggs. Being two much of a tyro to make the chemical himself, he purchased a sulphocyanide of mercury from a dealer in town, and began to rub it to powder in a stone mortar in the hospital pharmacy. He was called away before finishing it, and, being unaware of the danger, left the stuff in the mortar. During his absence a nurse, sent against the rules, by the sick officer for subnitrate of bismuth, took in lieu of it some of the sulphocyanide of mercury, which poisoned the patient, young De Carayon-Latour. As soon as trouble broke out the sergeant threw away the contents of the mortar and said

nothing. On investigation, traces of a mercural compound were found in the implement, and the cause of death was clearly traced to mercuric poisoning. But, as it was shown that the poison closet had not been unlocked, it was impossible to conceive how the mercury could have been procured, until the sergeant confessed his fault. It may be interesting to note that the present is said to be the first instance of fatal poisoning by mercuric sulphocyanide recorded by French authors. An accident occurred in 1865 to a princely guest of one of the Paris hotels, who received immediate medical attendance, and speedily recovered. In the Carayon-Latour case, on the contrary, the patient, to save a comrade from punishment, concealed his state as long as he could, and received medical treatment too late to save his life. Considering the reckless use of serpents' eggs by children and others, it must be conceded that the mercuric compound cannot be called a very violent poison. At the same time it cannot be considered the harmless insoluble combination that some pretend it to be. The treatment successfully resorted to in the older case was simple lime-water and reduced iron internally, and a warm poultice with laudanum on the abdomen. The next day the patient was well, and the voiding of a tapeworm, hitherto unsuspected, was the only reminder of the internal commotion caused by the sulphocyanide.

THE CHARITY INSTITUTIONS OF PARIS.—In recent years, in France, conscientious efforts have been made to ascertain the principal causes of the loss of population, and it has been demonstrated by numerous facts that one of these causes consists in the physical degeneration induced by the deficiency of alimentation in infancy; and the most eminent physicians of Paris, and the Director of Public Assistance, have endeavored to modify

and improve the system of nutrition in the public charitable institutions, providing for recently born children lactation adequate to the necessities of the temperament and constitution.

In the Hospital for Infants' Diseases, situated in Sabres Street, there exists a section for rickety boys and girls, whose miserable aspect produces an impression of pain up the mind—unfortunate beings who have inherited the organic vices of their parents, and who suffer from anaemia's cruel tortures.

The administration of the hospital is arranged in two separate pavilions, where there is much ventilation, with large windows that look out upon a garden, and whose walls have double rows of willow cradles perfectly equipped. The newly born receive here the personal care of the establishment, beginning with being weighed in the balance the same day they make their appearance, the operation being frequently repeated almost every month, in order to determine with exactness the development of the child. The little one is subjected to an especially nutritious diet of the most tonic kind, if it had been previously fed from a refractory goat liable to convey contagious germs, it having been found by experiment that the milk of this animal, although possessing nutritive principles of the most salutary kind, presents the inconvenience of communicating by abortion the effects of those nervous accidents to which the goat is subject.

The public charities of Paris, advised by the wise doctors of medicine, have substituted for the milk of goats that of the ass, and have installed an ample yard near the pavilion of the rickety and scrofulous children, which is only separated by a short covered passageway. Nothing is more picturesque than the spectacle of the lactation of the babies in this enclosure every morning.

The nurses, dressed in dark gowns with white caps and aprons, each carrying a child on the right arm and a little seat in the left hand, present themselves in exact turn to the women who have charge of the animals, and they hold the child, applying its lips to the teats of the docile animal. The children suck with avidity the liquid nutriment, which is fresh and of agreeable taste.

The Administration of Public Assistance of Paris has calculated that one young ass is able to lactate abundantly for a space of nine or ten months, and when this period has passed they are sold and replaced by others. It is well known that the milk of asses, by its vivifying qualities and nutritious principles, assimilates in a great degree the milk of the nurse, and these disinherited and sick children, enjoying its beneficial effects by its permanent and methodical use, are restored little by little to health and vigor.

DIABETIC PLAQUES OF THE VULVA.
—M. Besnier has called attention to an affection of the vulvar mucous membranes which has not hitherto received the consideration which it deserves.

It is characterized by the appearance at divers points of the vulvar mucosa of whitish plaques which seem to be exactly analogous to those patches of the mouth and tongue called psoriasis, or leucoplakia. This affection of the vulva occurs most frequently during the course of glycosuria, though it frequently follows or is coincident with uterine affections. In the former case the plaques usually disappear when the sugar is eliminated from the urine, but in both cases the plaques are liable to be transformed into epitheliomata—which is another point of resemblance between the vulvar and buccal affection. Besnier recommends (in the *Journal de Medecine et de Chirurgie Pratiques*) that these plaques should be treated locally, by alkaline injections or lotions carefully made after each urination and by the application of pomades.—*St. Louis Medical and Surgical Journal*.

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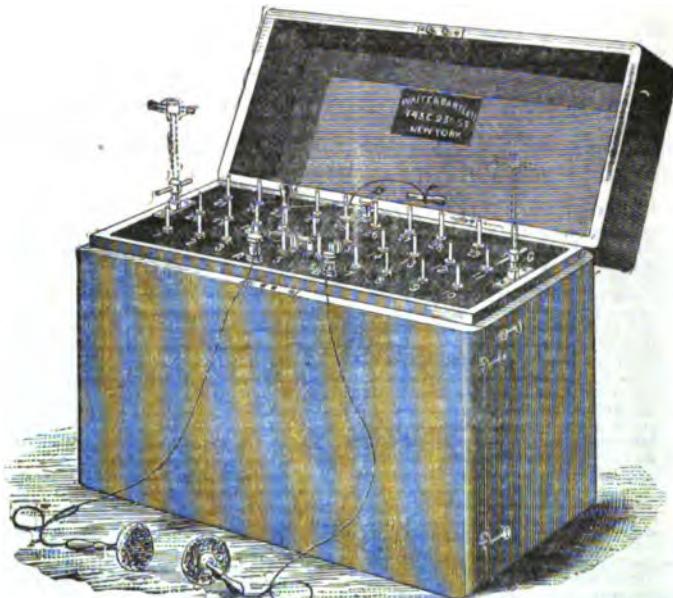
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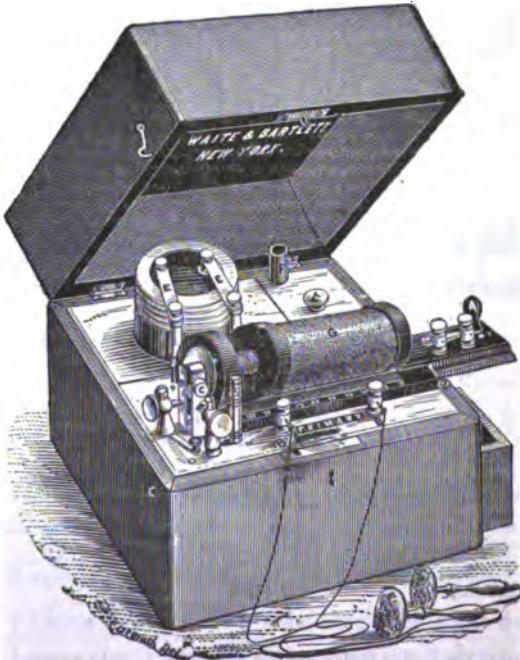
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We believe that the fat-digesting properties of pancreatine and bile are inseparable, and that without their union in the intestinal tract but little, if any, fat would be digested and absorbed.

PANCROBILIN will be found of great service in *Phthisis and other wasting diseases, Nervous Prostration, Constipation, Inanition, Malnutrition, Intestinal Indigestion* and wherever there is a failure to assimilate fats.

If the skin is first wet with LIQUID PANCROBILIN, the inunction of oils will be greatly facilitated.

LIQUID PANCROBILIN is put up in pound bottles.

PILL PANCROBILIN is put up in bottles holding 100 pills. The coating of the pills will resist acid digestion; when given as directed, but will be quickly dissolved in the alkaline secretions of the duodenum.

PHOSPHO-CAFFEIN COMP.

(Granular Effervescent.)

Formula for each dessertspoonful:—

Caffein.

Acidi Phosphorici aa, grains, ss.

Antipyrin.

Ext. Apii. Grav. dulc. (Celery), aa, grains, i.

Sodium Bromide, grains, v.

The satisfactory results produced by PHOSPHO-CAFFEIN COMP. in *Headaches, Neuralgia, Insomnia, Neurasthenia and general Nervous Irritability*, are not due to the effect of any one ingredient, but to the happy effect of the combination. A thorough series of comparative tests have demonstrated the superiority of the above formula over any other in the market.

REED & CARNRICK, New York.

Pruno-Phosphorated Syrup

(SYRUP PRUNO-PHOSPHOR.)

A Tonic of peculiar excellence, used with success in the treatment of Pulmonary Tuberculosis and kindred ailments.

Containing **PRUNUS VIRGINIANA**, with **Lime, Potash, Soda, Iron, Manganese, Quinine, Strychnine** making a preparation which proves to be of considerable utility.

Pruno-Phosphorated Syrup is a powerful tonic to the nervous system, aiding the digestion and the functions of assimilation at the same time.

It supplies the necessary phosphates to give energy, and thus prevents the attacks of disease.

Especially in America it is necessary to supply in some convenient form a nerve tonic, as business and professional men are worked at high pressure, and exhaust their latent energy. If the brain power is impaired from any cause, digestion immediately suffers, and the whole body, in time, is enfeebled.

Pruno-Phosphorated Syrup contains besides **Prunus Virginiana** and the phosphorous compounds, the nerve-invigorating drug strychnia—in combination with the blood-enriching iron—all the elements to produce good digestion, pure blood, and as a result, mental activity, uniting with a tonic power the property of calming irritation and diminishing nervous excitability.

The especial recognition which this preparation has received over other combinations of **Iron** and **Quinine**, is attributable to the discovery that it neither causes **Headache** nor interferes with **Digestion**. In cases where even moderate doses of **Quinine** produce head symptoms of such severity that the desired benefit of the alkaloid cannot be obtained, **Pruno-Phosphorated Syrup** may be freely administered without any disagreeable result.

Patients intolerant of **Iron** in every other form can readily assimilate **Pruno-Phosphorated Syrup**.

DOSE.—The *tonic dose* is one fluid drachm: *stimulant and tonic dose* combined, two fluid drachms.

Descriptive circular furnished to physicians on application.

Physicians desirous of giving Pruno-Phosphorated Syrup a trial, and will pay express charges, will be furnished with one regular sized bottle free.

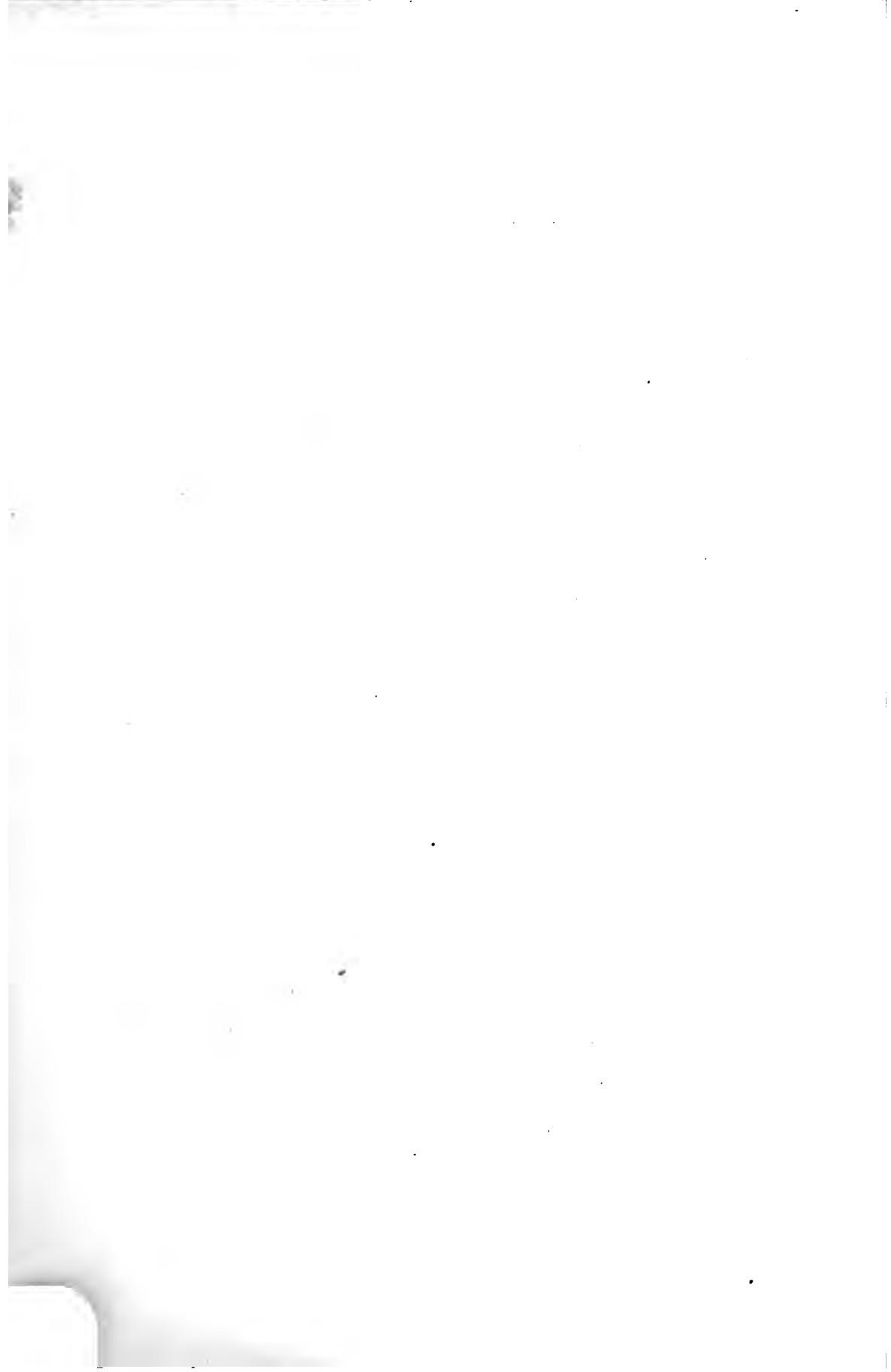
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